

SIXTH
ANNUAL REPORT

BY THE
MEDICAL OFFICER OF HEALTH
ON THE

*Health and Sanitary Conditions of the
County of Aberdeen*

FOR THE YEAR

1930.

ABERDEEN :
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STATISTICAL SUMMARY

(For the Districts and all the Burghs).

	Districts.		Burghs.		Total.
1. Acreage,	1,251,735	...	3,917	...	1,255,652
2. Population, (As estimated to the middle of 1930.)	109,826	...	38,504	...	148,330
3. Density of population per acre,	·087	...	9·8	...	·12
4. Birth-rate,	20·4	...	21·7	...	20·7
5. Infantile Mortality,	70·2	...	100·4	...	78·4
6. Death-rate,	12·06	...	13·8	...	12·5



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PREFACE.

There is herewith submitted my Sixth Annual Report for the year ended 31st December, 1930, on the Health and Sanitary Conditions of the County of Aberdeen. There are also incorporated reports by the County Bacteriologist, by the County Veterinary Inspector on the operation of the Milk and Dairies (Scotland) Act, 1914, and by the District and Burgh Sanitary Inspectors. It has been considered expedient to give the Sanitary Inspectors' reports *in extenso*, chiefly in view of the importance of surveying the housing conditions, the water supplies and the drainage systems existing in the area: in all my previous Annual Reports only a synopsis of their work was given.

In the end of 1929, proposals were made as to the co-ordination of the medical services of the County and City of Aberdeen. Conferences took place between representative members of the Town and County Councils with the result that, in May, 1930, both Councils approved the principles of co-ordination. Later, Kincardine County Council intimated their willingness to join in this Scheme, but, whilst the Town Council and County Council of Aberdeen are equal partners in the Scheme, the County Council of Kincardine have, for a preliminary period at least, been admitted on a customer basis.

**Co-ordination
of Medical
Services.**

The geographical area covered by this Regional Scheme practically coincides with that served by the Regional Committee appointed by the Voluntary Hospitals. The chief advantages of the Scheme are (1) the admission of patients from the adjacent Counties to the excellently equipped and staffed Hospitals of the Town Council, and (2) the appointment of a Central Staff has enabled the services of experts in Tuberculosis, Mother and Child Welfare work and in School Services to be made available over a wide area. The Regional Scheme has been in operation only for a comparatively short time, but the team work of the Staff has ensured its smooth and efficient working.

For the statistical data in this Report it has been necessary to make calculations on the official estimate of the population of the County as given by the Registrar-General. In subsequent years the estimate will be based on the 1931 census. The population of the Districts in 1921 was 113,567, and in 1931 it was 107,416—showing an actual decrease of 6,151: the population as estimated by the Registrar-General for the mid-year was 109,826—a decrease of 3,741. Again, at the 1921 census, the population in the Burghs was 39,857, and, at the 1931 census, it was 38,178—an actual decrease of 1,679, whereas the Registrar-General's estimated decrease to the middle of 1930 was 1,353. It would seem that such discrepancies which occur at every census indicate the necessity for having a quinquennial enumeration of the population.

Population.

The number of deaths in the rural areas was 1,325, which is equal to a death-rate of 12·06 per thousand of estimated population. The death-rate in 1929 was 13·3, and, in 1928, 13·4. In 1930, there was a marked decrease in the number of deaths from respiratory diseases and influenza whilst there was an increase in the number of deaths from cancer.

**General
Death-rate.**

There was a decrease in the number of notifications of scarlet fever and an increase in the case of diphtheria. In 1930, it was not possible to continue Schick (diphtheria) and Dick (scarlet fever) testing, with subsequent immunisation of those found to be susceptible. Past results in connection with immunisation against scarlet fever have been so unconvincing that it is not proposed to continue this branch of the work, but, in the case of diphtheria, active immunisation of the susceptible children in populous areas will be carried out.

**Infectious
Diseases.**

**Concentration
of Infectious
Diseases
Hospitals.**

The Council have decided to concentrate their Infectious Diseases Hospitals, of which there are twelve. The number is to be reduced to five, the retained Hospitals being those at Peterhead, Fraserburgh, Strichen, Huntly, and Aboyne. It is not intended to close the remaining Hospitals, but to find some other use for them: for example, they could be used for the sick poor, the aged and infirm blind or for mental defectives. So many duties in relation to the mentally and physically unfit have been placed on the Local Authority by the provisions of the Local Government (Scotland) Act, 1929, that it may confidently be stated that a suitable use will be found for those Hospitals which cease to function as Infectious Diseases Hospitals.

**Mother and
Child Welfare.**

The Maternity Service and Child Welfare Scheme is gradually extending and it is hoped gradually to increase the number of clinics throughout the County. In connection with existing clinics, the voluntary workers have given assistance in a most unstinting and praiseworthy manner.

**School Medical
Services.**

The medical inspection and treatment of school children has been carried out in the same satisfactory manner as in previous years. Dental treatment is so gaining in popularity that the dentists have found it impossible to visit all the schools each year, a fact which will, no doubt, receive the careful consideration of the Council. No official arrangements have yet been made for the operative treatment of enlarged tonsils and adenoids, the work being carried out either by the voluntary hospitals or the family practitioners.

Tuberculosis.

The number of notified cases of tuberculosis continues to be low. The incidence of pulmonary tuberculosis is steadily diminishing, but, in 1930, there were 142 non-pulmonary cases notified as compared with 112 in 1929. It is impossible to state whether or not there is an actual increase in the incidence of non-pulmonary tuberculosis—which is, in many cases, caused by milk infected with bovine tubercle bacilli—and it is more than probable that the excellent facilities now provided at Woodend Hospital are inducing medical practitioners to notify all cases coming within their purview, for it is well known that the completeness of notification of any infectious disease is directly proportional to the hospital accommodation provided.

It would be premature to assume that tuberculosis is “on the run.” Relatively little is known of this disease, and it is just possible that it recurs as do the ordinary zymotic diseases in wave cycles much more extended than is the case in, say, scarlet fever and diphtheria.

Housing.

Special attention is directed to the housing position in the County, as shown in Table X. in Section I. and Table V. in Section II. of this Report. In most of the Districts, the public realise the very advantageous provisions of the Housing (Rural Workers) Act, 1926. It is the most important, and, in fact, the only Housing Act by which assistance has been given to conserve housing in rural areas and to prevent rural depopulation. Aberdeenshire has availed itself more than most rural Local Authorities of the operation of this Act, and the County Council continue to give sympathetic consideration to all applications submitted to them.

HARRY J. RAE,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
4, ALBYN PLACE,

ABERDEEN, 30th August, 1931.

Section I.

GENERAL PUBLIC HEALTH OF THE DISTRICTS.

1.—VITAL STATISTICS.

Population.

The population of the eight Districts as ascertained at the last three decennial censuses was as follows :—

In 1901.	the population was	124,007.
In 1911,	„ „	119,209.
In 1921,	„ „	113,567.

In the last 20 years from 1901 to 1921, the actual fall in the population amounted to 10,440. The population as ascertained by the Registrar-General to the middle of 1930 was 109,826, a decrease of 301, as compared with the intercensal population of 1929. The longer the interval since the last census, the greater, as a rule, is the difference between the estimated population and the actual population. The estimated population for 1930 shows a decrease in each of the Districts, as compared with the 1921 decennial population. The total decrease amounts to 3,741.

TABLE I.

District.	Population at 1921 Census.	Estimated decrease at middle of 1930.
Deer,	27,177	... 974
Ellon,	13,311	... 411
Garioch,	12,490	... 689
Deeside,	12,037	. 146
Turriff,	10,684	... 441
Aberdeen,	22,777	... 94
Alford,	8,668	.. 617
Huntly,	6,423	... 369
Total.	113,567	... 3,741

The natural increase of population in 1930, that is the excess of births over deaths, was 913, as compared with 776 in 1929.

Marriages.

In 1930, 479 marriages were registered, as against 483 in 1929. The marriage-rate—the number of marriages per 1,000 of population—was 4·3, as compared with 4·4 in 1929.

Births.

The total number of births, corrected for inward and outward transfers, was 2,238. Of these, 1,133 were males and 1,105 females. This number shows that there were two more births in 1930 than in the preceding year. The Scottish birth-rate in 1930 was 19·3 per 1,000 of population and the County birth-rate was 20·4. In the immediately preceding years, the birth-rates for the County were—20·3 in 1929, 21·9 in 1928, 21·2 in 1927, 23·02 in 1926, 22·02 in 1925, and 22·3 in 1924. Of the total 2,238 births, 374 were illegitimate. The illegitimate birth-rate was thus 16·7 per 100 births; in 1929 it was 17·3; in 1928, 17·5; and in 1927, 16·04.

Deaths and Death-rate.

After making correction for transfers, we find that the deaths amounted to 1,325—664 males and 661 females. The corresponding death-rate per 1,000 of estimated population is 12·06, as compared with 13·3 in 1929. The total number of deaths registered in Scotland in 1930 was 64,283, which represents a death-rate of 13·2 per 1,000.

Causes of Death.

The principal causes of death, with the number of deaths attributable to the various well-defined diseases or groups of diseases, are given hereunder :—

Organic disease of the heart and blood vessels	383	deaths.
Respiratory diseases—		
(Excluding tuberculosis and influenza.)		
Pneumonia	67	} 137 „
Bronchitis	51	
Other lung diseases	19	
Cancer	161	„
Tuberculosis—		
Pulmonary	47	} 76 „
Non-pulmonary	29	
Kidney disease	41	„
Chief epidemic diseases—		
Diarrhoea and Enteritis	12	} 32 „
Whooping Cough	1	
Diphtheria	10	
Measles	2	
Scarlet Fever	4	
Enteric Fever	3	
Influenza	10	„
Appendicitis	9	„
Puerperal Sepsis	4	„
Diseases of early infancy and malformations	84	„
Violence	88	„

The two outstanding features in the causes of death, as compared with 1929, are :—

- (1) 95 fewer deaths from organic disease of the heart and blood vessels—the most common cause of death.
- (2) An increase in the number of deaths from cancer—161, as compared with 143 last year. This gives a death-rate per 100,000 of 146, which is the same as the figure for Scotland as a whole.

2.—MORBIDITY AND MORTALITY FROM INFECTIOUS DISEASES.

(a) Notifiable Infectious Diseases.

SCARLET FEVER.

The number of cases of scarlet fever notified in the Districts and Burghs during the past six years was as follows :—

1930	296	cases.
1929	356	„
1928	577	„
1927	603	„
1926	627	„
1925	398	„

In the prevalence of scarlet fever there is a rhythmic rise and fall. The crest of the wave was reached in 1926, when there were 627 cases. Since then there has been a continuous decline in the number notified each year, those notified in 1930 being 60 fewer than in 1929, despite the fact that the figures relating to the Burgh of Peterhead are included in this year's report.

Age Incidence.—Out of the 226 notifications from the Districts, 126 or 56 per cent. were of school age, and 40 or 18 per cent. were under school age. Ages of the notified cases are given in Table II.

TABLE II.
SCARLET FEVER.
Age Incidence of Cases (Districts).

Districts.	Under 1 year.	1-5.	5-15.	15-25.	25-45.	45-65.	Over 65.	Total.
Deer . . .	—	10	23	7	7	—	—	47
Ellon . . .	—	3	23	5	1	3	—	35
Garioch . . .	—	4	13	1	2	2	—	22
Deeside . . .	—	1	3	—	1	—	—	5
Turriff . . .	—	3	14	4	5	—	—	26
Aberdeen . . .	—	12	13	4	2	—	—	31
Alford . . .	1	1	15	3	3	—	—	23
Huntly . . .	—	5	22	4	5	1	—	37
Totals . . .	1	39	126	28	26	6	—	226
Percentage .	·44	17·3	55·6	12·4	11·5	2·7	—	—

Seasonal Prevalence.—The season of greatest prevalence was, as is usual, towards the end of the year, especially in the months of September, October, and November. Table III. shows the monthly incidence in the Districts and Burghs.

TABLE III.
SCARLET FEVER.

Monthly Incidence of Cases (Districts and Burghs).

Month.	Districts.		Burghs.		Total.
January	25	...	8	...	33
February	19	...	1	...	20
March	15	...	5	...	20
April	24	...	5	...	29
May	22	...	4	...	26
June	16	...	6	...	22
July	15	...	—	...	15
August	9	...	8	...	17
September	22	...	7	...	29
October	30	...	7	...	37
November	19	...	16	...	35
December	10	...	3	...	13
	—		—		—
Total	226	...	70	...	296
	==		==		==

Hospital Treatment.—Of the 296 cases notified during the year, 92·2 per cent., that is 273 cases, were treated in Infectious Diseases Hospitals. Table IV. gives particulars relating to the cases that were treated institutionally. The number of days in hospital per completed case was 35. In 1929, the number was 42·7.

TABLE IV.
SCARLET FEVER.
Hospital Treatment.

Hospital.	Area Served.	Cases Notified.	Admissions to Hospital.	Period of Institutional Treatment in Days, per Completed Case.	Number Discharged during Year.	Number of Days in Hospital per Completed Case.	Number of Deaths.	Death-Rate per 100 Cases.
Strichen	Deer District; Rose-hearty Burgh	47	37	1,491	40	37	—	—
Ellon	District and Burgh	37	37	1,720	41	42	2	5·4
Inverurie	District of Garioch and Burghs of Inverurie, Kintore and Oldmeldrum	37	35	1,441	36	40	—	—
Aboyne	Deeside District	5	3	176	4	44	—	—
Turriff	District and Burgh	42	42	711	40	18	1	2·4
Summerfield	Aberdeen District	31	22	572	19	30	—	—
Alford	District	23	23	860	23	37·4	—	—
Huntly	District and Burgh	48	48	1,809	52	35	—	—
Pallater	Burgh	—	—	—	—	—	—	—
Fraserburgh	Burgh	17	17	631	16	39·4	—	—
Braemar	—	—	—	—	—	—	—	—
Peterhead	Burgh	9	9	425	10	42·5	—	—
Total		296	273	9,836	281	35	3	1·1

Mortality.—The deaths from scarlet fever numbered 3, equivalent to a death-rate of ·02 per 1,000 of population at all ages and a case mortality of 1 per cent.

DIPHTHERIA.

There is again to be noted an increase in the number of diphtheria cases, 442 notifications having been received, as compared with 263 in 1929. It must, however, be remarked that in the figure 442, are included 116 cases from Peterhead. In previous years, Peterhead figures were not included. Tables V., VI. and VII. show respectively the age incidence, the monthly incidence and particulars relating to hospital cases.

TABLE V.

DIPHTHERIA.

Age Incidence of Cases (Districts).

Districts.	Under 1 Year.	1-5.	5-15	15-25.	25-45.	45-65	Over 65	Total.
Deer . . .	1	6	39	16	8	1	—	71
Ellon . . .	—	3	10	3	6	—	1	23
Garioch . . .	—	1	8	4	—	1	—	14
Deeside . . .	—	—	3	1	1	—	—	5
Turriff . . .	—	1	5	4	4	1	—	15
Aberdeen . . .	—	2	10	8	4	1	—	25
Alford . . .	—	—	1	3	—	—	—	4
Huntly . . .	—	—	3	1	—	—	—	4
Totals . . .	1	13	79	40	23	4	1	161
Percentage . . .	·62	8·07	49·06	24·8	14·3	2·5	·6	100

TABLE VI.

DIPHTHERIA.

Monthly Incidence (Districts and Burghs).

Month.	Districts.		Burghs.		Total.
January	9	...	35	...	44
February	6	...	25	..	31
March	10	...	29	...	39
April	19	...	22	...	41
May	13	...	15	...	28
June	13	...	31	...	44
July	16	...	37	...	53
August	23	...	24	..	47
September	19	...	13	...	32
October	3	...	12	...	15
November	14	...	8	...	22
December	16	...	30	...	46
Total	161	...	281	...	442

TABLE VII.
DIPHTHERIA.
Hospital Treatment.

Hospital.	Cases Notified.	Admissions to Hospital.	Period of Institutional Treatment in Days, per Completed Case.	Number Discharged during Year.	Number of Days in Hospital per Completed Case.	Number of Deaths.	Death-rate per 100 Cases.
Strichen .	73	74	1,828	66	28	3	4
Ellon .	41	38	1,495	43	35	—	—
Inverurie .	30	32	953	33	29	—	—
Aboyne .	5	6	169	6	28	—	—
Turriff .	20	20	446	18	35	2	10
Summerfield .	25	17	551	18	30.6	1	5.9
Alford .	4	2	45	2	22.5	—	—
Huntly .	5	4	84	2	42	1	25
Ballater .	—	—	—	—	—	—	—
Fraserburgh .	123	125	2,949	128	23	3	2.4
Braemar .	—	—	—	—	—	—	—
Peterhead .	116	115	2,485	103	24.1	2	1.7
Total .	442	433	11,005	419	26.3	12	2.8

Mortality.—There were 16 deaths amongst the 442 cases. This represents a case mortality of 3.6 per cent., as compared with 2.7 in 1929 and 5.5 in 1928.

Active Immunisation against Scarlet Fever and Diphtheria.

Shortage of medical staff necessitated the suspension of testing and subsequent active immunisation of those found to be susceptible to scarlet fever and diphtheria. During the previous five years intensive work in this direction had been carried out and it is hoped again to re-institute this form of artificial protection, at least against diphtheria. The results obtained in the last five years have shown the undoubted value of Schick-testing and of injections of toxoid antitoxin mixture given as a means of preventing diphtheria. The value of similar measures directed against scarlet fever is much more debatable, and, for the present at any rate, it is not proposed to continue Dick-testing and immunisation with scarlet fever toxin.

TYPHOID AND PARA-TYPHOID FEVERS.

In 1930, 22 cases of typhoid and para-typhoid fever were notified, as against 40 notifications in 1929. The deaths numbered 3, which is the same as in the previous year. The distribution of the cases was as follows:—

Deer District	.	.	.	.	.	7 cases.
Aberdeen „	.	.	.	.	.	3 „
Fraserburgh Burgh	.	.	.	.	.	1 case.
Huntly „	.	.	.	.	.	1 „
Peterhead ..	.	.	.	.	.	10 cases.
Total						22 „

The number of notifications and deaths in each year since 1914 is given in Table VIII.

TABLE VIII.

YEAR.	Notifications.	Deaths.	Percentage Case Mortality.
1914	25	3	12
1915	19	4	21
1916	17	—	—
1917	22	4	18·2
1918	26	4	15·4
1919	16	3	18·8
1920	28	2	7·1
1921	23	4	17·4
1922	19	1	5·3
1923	13	1	7·7
1924	3	—	—
1925	22	2	9·1
1926	3	—	—
1927	22	1	4·5
1928	16	2	12·5
1929	40	3	7·5
1930	22	3	13·6
Totals	336	37	11

Three of the 22 cases were typhoid fever and the remaining 19 suffered from para-typhoid B. Of these 19, 10 were notified from the Burgh of Peterhead. The total number, 22, is not comparable with the numbers for the previous years as all the burghs in the County are now included within its administration.

ACUTE POLIOMYELITIS (INFANTILE PARALYSIS).

In 1930, no case of infantile paralysis was notified.

ENCEPHALITIS LETHARGICA (SLEEPY SICKNESS).

Encephalitis lethargica, epidemic encephalitis or sleepy sickness, was made a compulsorily notifiable disease in 1925. The number of cases brought to the notice of the Health Departments of the County and City of Aberdeen since 1921 is shown in the following table :—

TABLE IX.

Year.	County.	City.
1921	0	3
1922	1	0
1923	3	0
1924	2	7
1925	2	9
1926	2	0
1927	4	1
1928	0	4
1929	2	3
1930	2	1
Total,	18	28

Two cases of encephalitis lethargica were notified during 1930. One, a male aged 29 years, belonging to the Alford District, was treated in Woodend Hospital. The other case, from Turriff Burgh, a man of 35 years, received treatment at home.

POLIO-ENCEPHALITIS.

One case of polio-encephalitis occurred in the Burgh of Peterhead.

CEREBRO-SPINAL FEVER.

There were no cases of cerebro-spinal fever during the year.

ACUTE INFECTIVE JAUNDICE.

Five cases were notified during the year, but bacteriological investigation failed to confirm the diagnosis, and it was shown that the cases were acute catarrhal jaundice, caused by a virus.

ERYSIPELAS.

Ninety-five cases were notified, as compared with 89 cases in the previous year. Of these, 13 were treated in infectious diseases hospitals. There were no deaths.

PNEUMONIA.

Acute primary and acute influenzal pneumonia are notifiable under the Public Health (Pneumonia, Malaria, Dysentery, &c.) Regulations (Scotland), 1919. Broncho-pneumonia, if acute and primary, is also a notifiable disease.

The number of cases notified in the Districts and Burghs, including Peterhead, was 312, classified as under:—

1. Acute primary pneumonia, . . .	124
2. Acute influenzal pneumonia, . . .	8
3. Acute primary broncho-pneumonia, . . .	98
4. Acute pneumonia (type not specified), . . .	82
	<hr/>
	312
	<hr/>

The number of cases notified in 1929 was 442; in 1928, 338; and in 1927, 346. Ninety-one of the 312 notified cases died—a percentage case mortality of 29, as compared with 24 in 1929 and 30·2 in 1928. Twenty-five of the deaths occurred in children under 1 year of age and 5 in children between 1 and 5 years. Thus, 30 of the deaths, or 33 per cent., occurred in children under 5 years of age. Excluding cases treated in the Aberdeen Royal Infirmary and Sick Children's Hospital, 55 cases of pneumonia from the County received institutional treatment, as compared with 82 in 1929. Domiciliary nursing is also provided for by the Pneumonia Scheme, and in 1930, 5 cases had the services of special pneumonia nurses supplied by the Public Health Department.

MALARIA.

One case was notified.

DYSENTERY.

Twenty-three cases of dysentery were notified, as against 11 in 1929. Six cases were treated in the Aberdeen City Hospital. The remaining cases were treated at home.

CHICKEN-POX.

Chicken-pox continues to be a notifiable disease until the end of 1931, in terms of the Public Health (Chicken-pox) Amendment Regulations (Scotland) Act, 1930. In 1930, 360 cases were notified, as compared with 337 in 1929 and 179 in 1928. No case required institutional treatment.

SMALL-POX.

One case of small-pox, in a female aged 24 years, occurred in the County during the year. The case was connected with an outbreak in the City. The patient's sister, who was suffering from a puerperal condition, was in an adjacent ward in the Aberdeen City Hospital when the original case of small-pox was admitted; she refused to be vaccinated, and, on discharge from the Hospital, she stayed with her sister first in Aberdeen and later in a village in Kincardineshire.

The patient thereafter went into domestic service in a village in Aberdeenshire. She arrived there on 26th June, sickened on 2nd July and was in bed from 3rd to 8th July. On the latter date, the general practitioner in attendance intimated to the Public Health Department that he suspected that the patient was suffering from small-pox. Medical Officers from the Health Department immediately visited the patient, confirmed the diagnosis, and on the night 8th-9th July she was removed to Summerfield Hospital which had been set aside for the reception of cases of small-pox.

The disease in this case was of the semi-confluent and hæmorrhagic type. The patient died on 12th July.

All known contacts, about 60 in number, were re-vaccinated. Thorough disinfection of the premises was carried out and no further case occurred in the County.

Great credit is due to the general practitioner referred to for his expert handling of the case and for the great assistance which he gave to the Public Health officials.

(b) Non-notifiable Infectious Diseases.

The three principal non-notifiable infectious diseases are measles, whooping cough, and mumps.

Measles was prevalent during May, September, October, and November. Two hundred and ninety-two cases were brought to the notice of the Public Health Department by Head Teachers. Eight deaths from measles occurred.

Whooping cough was most prevalent in May and June. Fifteen cases were brought to our notice; there were 3 deaths from this disease. The death-rate was thus '02 per 1,000 of population. These numbers, of course, do not represent the total affected with either whooping cough or measles, as neither of these diseases is notifiable.

Sixty cases of mumps were reported.

3.—HOUSING.

During the last five years the total number of new houses provided in rural areas in Aberdeenshire was 636. The number of new houses completed in 1930 was 82, and the number in course of erection at the end of the year was 58. The following are particulars for each year since 1926 :—

	New Houses.					In course of erection at end of year.	
1926	124	...	69
1927	111	...	107
1928	149	...	70
1929	169	...	33
1930	82	...	58

The number of new houses completed in 1930, or in course of erection at the end of the year, per 1,000 of population, is shown in Table X., where each District is dealt with individually.

TABLE X.
HOUSING IN COUNTY DISTRICTS—1930.

	Deer.	Ellon.	Garioch.	Deeside.	Turriff.	Aberdeen.	Alford.	Huntly.	Total.
A.— <i>Completed during 1930.</i>									
1. With aid of Subsidy—									
(a) By Local Authority . . .	9	—	—	16	—	4	4	—	33
(b) By private enterprise . . .	1	4	3	3	1	7	1	—	20
2. By unassisted private enterprise	5	—	—	4	—	15	3	2	29
B.— <i>In course of erection at 31st December, 1930.</i>									
1. With aid of Subsidy—									
(a) By Local Authority . . .	—	—	—	—	—	28	—	—	28
(b) By private enterprise . . .	1	—	3	1	—	11	—	3	19
2. By unassisted private enterprise	—	—	—	2	1	3	4	1	11
Totals	16	4	6	26	2	68	12	6	140
Population	26,203	12,900	11,801	11,891	10,243	22,683	8,051	6,054	109,826
Number of new houses completed in 1930 or in course of erection, per 1,000 of population	·61	·31	·5	2·2	·2	3	1·5	1	1·3
Number of applications lodged during 1930 under Housing (Rural Workers) Act, 1926	178	20	30	12	44	61	5	—	350

It will be observed that only 82 new houses were completed in 1930, as compared with 169 in 1929, but that at the end of the year 58 were in course of erection, as compared with 33 in the previous year.

With regard to new houses, Aberdeen District again leads with a rate of 3 per 1,000 of population. Deeside District comes next with 2·2 and then Alford with 1·5.

By far the most important of housing enactments in County areas is the Housing (Rural Workers) Act, 1926, which was passed with a view to stemming the tide of rural depopulation. Aberdeenshire has taken full advantage of the provisions of this Act. Since it came into operation, up to 31st December, 1930, *no fewer than 753 houses have been reconstructed under this provision.*

During the first six months of 1931 there has been an added stimulus, with the result that the total number of houses reconstructed under this Act, from the commencement of its operation to 30th June, 1931, is 928.

Aberdeenshire deserves the greatest credit for the manner in which it has responded to the rural housing needs by taking full advantage of the Housing (Rural Workers) Act.

By the Housing (Rural Workers) Act, 1926, there is available a grant of two-thirds of the estimated cost of the works or a maximum sum of £100 in respect of each dwelling. This grant may be made either by way of a lump-sum payment or by the provision during a period not exceeding 20 years of any part of any periodical sums payable by way of loan charges for the purpose of carrying out the works. When, however, the grant is made to a landlord within the meaning of the Small Landowners (Scotland) Act, the grant would be made in a lump sum. A stipulation which must be observed is that the house, after completion of the work, shall not exceed £400 in value.

There has been issued the Housing (Rural Workers) (Amendment) Act, 1931, whereby Local Authorities may make grants or loans under the Housing (Rural Workers) Act until 1st October, 1936.

A general survey of the housing needs of the eight Districts in the County has recently been made by the Sanitary Inspectors, who give the following as a statement of the requests for housing in their respective Districts:—

District.	Location of required new houses.	Estimated number of new houses required.	Total.
Deer,	Longside,	6	120
	New Deer,	6	
	Strichen,	8	
	Inverallochy, }	50	
	Cairnbulg, }		
	Pitullie, }		
	New Pitsligo,	20	
	Auchnagatt,	6	
	Aberdour,	10	
	Rathen Parish,	4	
St. Fergus,	10		
Ellon,	—	24	
	Cruden Bay,		4
	Collieston,		6
	Methlick,		2
	Hatton,		6
	Tarves,		4
	Blackhill Quarries,		2
Garioch,	—	22	
	Insch,		12
	Kemnay,		10
Deeside,	—	36	
	Tarland,		12
	Corse,		4
	Individual houses throughout District,		20
	—		

District.	Location of required new houses.	Estimated number of new houses required.	Total.
Turriff, . . .	Cuminestown,	6	26
	Garmond,	4	
	New Byth,	10	
	Rothienorman,	4	
	Auchterless,	2	
		—	
Aberdeen, . . .	Bucksburn,	50	100
	Peterculter,	20	
	Skene,	4	
	Dyce,	4	
	Oldmachar,	16	
	Fintray,	4	
	Newmachar,	2	
		—	
Alford,	Alford Village,	6	32
	Tullynessle,	2	
	Lumsden,	20	
	Kennethmont,	2	
	Glenkindie Estate,	2	
		—	
Huntly,	Rhynie,	10	58
	Replacement of unfit houses scattered throughout District,	20	
	Gartly,	2	
	Drumblade,	2	
	Cairnie,	20	
	Forgue,	4	
		—	

From the foregoing estimates, it will be seen that at least 418 new houses are asked for in the rural areas of Aberdeenshire. A considerable proportion of these are to replace houses at present unfit for human habitation and to house the inhabitants of the Districts according to present-day standards. Such a scheme of housing which, for a rural area, will be acknowledged to be extensive, must necessarily be spread over a period of years. Several apparently insurmountable difficulties obtrude themselves. For example, some of the villages mentioned in the list are decadent and it is certain that the inhabitants of these could not pay anything approaching an economic rent, especially as a process of "decanting" would not be effective in an adequate degree. The condition of existing houses is being examined by the Medical Officer of Health and Sanitary Inspectors and the economic need of houses being investigated. Thereafter, it will be for the Local Authority to decide to what extent it is practicable to carry out the suggested programme. It is unfortunate that the demand for houses in some parts of the County synchronises with serious depopulation and abandonment of houses in other areas.

In connection with the practical operation of the Housing (Rural Workers) Act, 1926, the County Clerk has drawn up the following instructive Memorandum, which is herewith appended for information:—

Memorandum by County Clerk regarding Grants under the Housing (Rural Workers) Act, 1926.

The Department are clear that they cannot give any lead to a Local Authority as to a definition of "agricultural worker," as the Act clearly leaves it to the County Council to say who an agricultural worker is and what, in their area, he would pay as rent for a house. The officials of the Department have indicated, unofficially, that they see no objection to the procedure which hereinafter I suggest for consideration, and they emphasise the desire of the

Government that full use should be made of the Act for the passing of which the previous Government was responsible. It has been indicated to me that the Government are likely to bring pressure to bear on County Councils in Scotland to close all houses which do not comply with Public Health standards. The closing of such houses normally involves the question of providing substitute accommodation for workers.

There is no definition of agricultural worker, and though many speakers in the House of Commons have used the term as synonymous with farm servant, the responsibility for its definition appears to rest with the Council.

It is suggested for the consideration of the Sub-Committee that they should recommend the Council to proceed on the following lines :—

1. Agricultural worker should be held to include anyone mainly engaged on any agricultural, pastoral, or horticultural pursuit, including cattlemen, shepherds, dairymen, and market gardeners;
2. The Council must continue to be satisfied that the work proposed is satisfactory, and that the value of the house, when completed, does not exceed £400. The officials of the Department recognise that, owing to the difficulty of securing a purchaser for a house on a farm away from a village or town, this value may be that of a considerable dwelling;
3. Where the acreage of the holding does not exceed 50 acres or the rent does not exceed £50, a grant should be given, on a satisfactory report as to the work to be done and as to the applicant's status, provided that the house, when altered, will be a satisfactory house complying with Public Health standards;
4. Where the applicant's holding is in excess of the Small Landholders' limits of acreage and rent, the application should be considered on its merits and especially with regard to the following considerations :—
 - (a) Whether the house in its present condition is insanitary or unhealthy;
 - (b) What is the economic position of the applicant, and, particularly, whether it is likely that, without grant aid, he would be able to put his house in a condition to comply with reasonable Public Health standards;
 - (c) Whether agricultural depression or other cause has brought within the limits of the Act an owner-occupier who is dependent for a living solely or mainly on his holding, even though its limits are materially beyond the 50 acres and £50 rent;
 - (d) Whether it would be reasonable to interpret agricultural worker as including an owner-occupier of a holding beyond the Small Landholders' limits if he is in a position to improve his house without grant assistance;
 - (e) Whether it is reasonable to assume that Parliament intended to provide for personal likes or amenities involving neither questions of health standards nor of a reasonable standard of decent social conditions;
 - (f) Where the Council decide that an application by an owner-occupier or a landowner, while within the terms of the Act, is not a case where they can recommend a grant, but the house is unsatisfactory on health grounds and the owner, from depression or other cause beyond his control, cannot either provide the necessary capital nor borrow it on reasonable terms, they might consider whether they might not legitimately exercise their power under the Act to lend the necessary capital on easy terms. The loan would

be repayable over a reasonable period and an undertaking would require to be given that the house would be occupied by an agricultural worker during the period of loan. The Act leaves it to the discretion of the Council to assist by way of grant or loan, but, while assistance by way of grant is in the ordinary case the more satisfactory procedure, it seems a legitimate construction of the Act to extend the power to lend beyond the limits where it is deemed legitimate to give assistance by way of grant.

H. L. F. FRASER,
County Clerk.

4.—DISINFECTIONS.

The number of official disinfections of premises performed by the several District Sanitary Inspectors is given hereunder :—

TABLE XI.

	Deer.	Ellon.	Garioch.	Deeside.	Turriff.	Aberdeen.	Alford.	Huntly.	Total.
After Scarlet Fever	42	36	22	4	25	30	18	36	213
„ Diphtheria	70	22	12	5	16	25	4	5	159
„ Enteric Fever	3	—	—	—	1	2	—	—	6
„ Tuberculosis	10	—	8	10	7	12	—	2	49
„ Other Infectious Diseases	—	—	2	20	11	7	4	4	48
Total	125	58	44	39	60	76	26	47	475

5.—FACTORY AND WORKSHOPS ACT.

In 1930, there were 1,007 factories and workshops on the register. Details as to the number of inspections, notices served, defects found and remedied, appear in Table XII.

TABLE XII.

	Deer.	Ellon.	Garioch.	Deeside.	Turriff.	Aberdeen.	Alford.	Huntly.	Total.
Number on Register	264	139	105	132	87	142	75	63	1007
„ of Inspections	83	76	85	120	140	103	86	41	734
Notices served under Section 2 (3), &c.	1	—	6	—	—	3	—	3	13
Defects found	1	8	6	1	—	3	3	3	25
„ remedied	1	8	5	1	—	3	3	3	24

Section II.

THE HEALTH OF THE BURGHS.

VITAL STATISTICS.

Population.—The population of the Burghs, as estimated by the Registrar-General to the middle of 1930, was 38,504. This number includes the Burgh of Peterhead which, until the end of 1929, had a separate Medical Officer of Health.

As compared with the Registrar-General's estimate for mid-year 1929, there was a decrease in all the Burghs, with the exception of Ballater and Fraserburgh.

TABLE I.

Burghs.	1921 Census.	As estimated at middle of 1929.	As estimated at middle of 1930.	Increase or Decrease.
Ballater . . .	1,542	1,474	1,482	+8
Ellon	1,261	1,234	1,227	-7
Fraserburgh . .	10,514	10,114	10,124	+10
Huntly	3,752	3,608	3,583	-25
Inverurie . . .	4,455	4,276	4,266	-10
Kintore	741	725	719	-6
Oldmeldrum . .	1,015	1,006	1,002	-4
Rosehearty . . .	1,267	1,174	1,165	-9
Turriff	2,152	2,123	2,098	-25
Peterhead . . .	13,126	12,842	12,838	-4
Totals	39,825	38,576	38,504	-72

Marriages.—There were 362 marriages, representing a marriage-rate of 9·4 per 1,000 of population. Figures appearing in previous Annual Reports are not comparable, because the Burgh of Peterhead was not included.

Births.—A record of the total number of births, the corrected birth-rates, the number of illegitimate births and the illegitimate birth-rates are given in Table II.

TABLE II.

Burghs.	Number (including Illegitimate Births)	Birth-rate (corrected).	Illegitimate Births.	Illegitimate Birth-rate per 100 Total Births.
Ballater . . .	17	11·5	1	5·9
Ellon	26	21·2	3	11·5
Fraserburgh . .	225	22·2	28	12·4
Huntly	77	21·5	10	13·1
Inverurie . . .	81	19·0	7	8·6
Kintore	13	18·1	—	0·0
Oldmeldrum . .	23	23·0	6	26·1
Rosehearty . . .	28	24·0	5	17·9
Turriff	47	22·4	9	19·1
Peterhead . . .	300	23·4	22	7·3
Totals	837	21·7	91	10·9
Corresponding figures for 1929 . . .	493	19·2	59	11·9

Deaths.—There were 531 deaths, representing a death-rate of 13·8 per 1,000 of estimated population.

Causes of Death and Death-rate.

The principal causes of death and death-rate, with the number of deaths attributable to the various well-defined diseases or groups of diseases, are given hereunder :—

TABLE III.

Causes of Death.	BURGHs										TOTAL
	Ballater	Ellon	Fraserburgh	Huntly	Inverurie	Kintore	Oldmeldrum	Rosehearty	Turriff	Peterhead	
Diseases of Heart and Blood Vessels . . .	7	6	30	16	24	5	8	8	11	50	165
Respiratory Diseases—											
Pneumonia	2	1	7	2	2	—	—	2	3	5	24
Bronchitis	—	—	9	1	4	1	—	1	5	5	26
Other	—	—	2	—	—	—	1	—	—	2	5
Malignant Tumours . . .	1	3	7	9	11	—	1	1	10	16	59
Tuberculosis—											
Pulmonary	2	1	5	2	1	—	—	—	2	6	19
Non-pulmonary	—	—	—	1	4	—	—	—	1	7	13
Kidney Diseases	1	3	6	1	5	1	—	—	1	2	20
Chief Epidemic Diseases—											
Diarrhoea	—	—	1	1	1	—	—	—	—	2	5
Whooping Cough	—	—	—	—	—	—	—	—	—	2	2
Diphtheria	—	1	3	—	—	—	—	—	—	2	6
Measles	—	—	4	—	—	—	—	—	—	2	6
Appendicitis	—	1	—	1	—	—	—	—	1	2	5
Influenza	—	—	—	—	3	—	—	—	—	3	6
Puerperal Sepsis, &c . .	1	—	—	—	—	—	—	—	1	1	3
Diseases of Early Infancy .	—	1	9	4	6	—	2	1	3	21	47
Violence	2	1	5	1	3	—	2	2	2	7	25
Other	4	2	16	11	7	3	1	10	16	25	95
TOTAL	20	20	104	50	71	10	15	25	56	160	531

TABLE IV.

Burghs	Number of Deaths	Death-rate per 1,000
Ballater	20	13·5
Ellon	20	16·3
Fraserburgh	104	10·3
Huntly	50	13·9
Inverurie	71	16·6
Kintore	10	13·9
Oldmeldrum	15	14·9
Rosehearty	25	21·4
Turriff	56	26·7
Peterhead	160	12·5
TOTAL	531	13·8

INCIDENCE OF THE COMMONER INFECTIOUS DISEASES.

In 1930, there were notified 70 cases of scarlet fever and 281 of diphtheria, a marked increase in both diseases.

Twelve cases of typhoid or para-typhoid fever were notified in 1930 and all received institutional treatment. Their distribution was as follows :—

Peterhead	.	.	.	.	.	.	.	10 cases.
Fraserburgh	.	.	.	.	.	.	.	1 case.
Huntly	.	.	.	.	.	.	.	1 „

All these cases recovered.

HOUSING.

A summary of the housing activities in each Burgh appears in Table V. Reckoned as so many houses per 1,000 of population, Turriff takes premier position with 7.1. Then follow Inverurie with 6.09, Peterhead with 3.04, Kintore with 2.8, Rosehearty with 1.7 and Ellon with 1.6.

Seven applications for assistance were made to Huntly Town Council under the Housing (Rural Workers) Act, 1926.

The Housing Act, 1930, offers generous terms to Local Authorities and several Burghs, for example, Fraserburgh and Peterhead, have framed schemes under this Act.

Although the Housing (Rural Workers) Act, 1926, is applicable to Burghs very little advantage has been taken of its provisions.

TABLE V.
HOUSING IN BURGHS—1930.

	Ballater.	Ellon.	Fraserburgh.	Huntly.	Inverurie.	Kintore.	Oldmeldrum.	Rosehearty.	Turriff.	Peterhead.	Total
A.— <i>Completed during 1930.</i>											
1. With aid of Subsidy—											
(a) By Local Authority	—	—	—	—	24	—	—	2	11	16	53
(b) By private enterprise	1	1	4	—	2	—	—	—	—	2	10
2. By unassisted private enterprise	—	—	1	1	—	—	1	—	2	5	10
B.— <i>In course of erection at 31st December, 1930.</i>											
1. With aid of Subsidy—											
(a) By Local Authority	—	—	—	—	—	—	—	—	—	16	16
(b) By private enterprise	—	—	2	—	—	1	—	—	—	—	3
2. By unassisted private enterprise	—	1	—	—	—	1	—	—	2	—	4
Total	1	2	7	1	26	2	1	2	15	39	96
Population	1,482	1,227	10,124	3,583	4,266	719	1,002	1,165	2,098	12,838	38,504
Number of new houses completed in 1930 or in course of erection, per 1,000 of population	7	1.6	7	3	6.09	2.8	1	1.7	7.1	3.04	2.5
Number of applications lodged during 1930 under Housing (Rural Workers) Act, 1926	—	—	—	7	—	—	—	—	—	—	7

Section III.

MATERNITY AND CHILD WELFARE SERVICES.

The Scheme for Mother and Child Welfare now embraces the eight Districts and the ten Burghs within the County. Prior to 16th May, 1930—when the Local Government (Scotland) Act, 1929, came into operation—the Burghs of Fraserburgh and Peterhead were excluded from this Scheme.

This Scheme, which is essentially preventive in character, is even now only in its infancy and one of its main ideals is to ensure that the health of the pre-school child should be conserved and that the child, on attaining school age, should be physically fit. Imperceptibly, the Maternity and Child Welfare Scheme must merge into the Scheme for the Medical Inspection and Treatment of School Children and thus the large percentage of defects in children when they enter school would be diminished.

This Scheme has as its objects—(1) The care of mothers before, during and after confinement; (2) the preservation of the health of children until they attain the age of five years; (3) the home visitation of mothers and infants by Health Visitors; (4) the inauguration of measures for the prevention and effective treatment of abnormal conditions in mother and child; (5) the provision of institutional treatment for women during confinement and for mothers suffering from puerperal fever or pyrexia; (6) adequate institutional treatment for children suffering from ophthalmia neonatorum, measles or whooping cough; (7) the provision of “home-helps” in exceptional cases; and (8) the dissemination of health propaganda through the medium of Child Welfare Clinics.

The success of our Mother and Child Welfare Scheme depends largely on two factors, namely, the co-operation of the general practitioners in the area and the assistance rendered by the district nurses and voluntary workers. The unobtrusive work performed by such voluntary organisations as the Women’s Rural Institutes is beyond praise and seldom receives the credit due to it.

Child Welfare Clinics were established at Huntly and Inverurie in 1926 and at St. John’s Clinic, Bucksburn, in 1928. In 1929, a Child Welfare Clinic was established at Ellon, the initial step being taken by the Ellon Red Cross V.A.D., under whose auspices was delivered a series of lectures on mothercraft and general health subjects: these lectures proved so popular that they led to the establishment of a Child Welfare Clinic in Ellon in 1929. This illustrates the advantage of voluntary effort. In my opinion, no clinic run on purely official lines will achieve complete success: there must be the associated influence of the voluntary worker: whether she belongs to the Nursing Association, to the Women’s Rural Institute, to the V.A.D. or other organisation it matters not. Just as in the treatment of general diseases, the voluntary hospitals are indispensable, so in local clinics success cannot be achieved unless the clinics are supported by the sympathetic aid of voluntary workers.

Births and Birth-rates.

The statistics of 1930 include the Burghs of Peterhead and Fraserburgh and are therefore not comparable with the figures appearing in previous Annual Reports.

The number of births registered in the area embraced by the Scheme was 3,075. The estimated population of the area was 148,330. The birth-rate was 20·7. Of the 3,075 births, 465 were illegitimate, giving an illegitimate birth-rate per 100 births of 15·1.

Infantile Mortality.

The term Infantile Mortality means the number of children dying under one year of age. In 1930, the infantile mortality was 241.

The infantile mortality rate, that is, the number of deaths of children under one year of age, per 1,000 registered births, was 78·4.

The causes of the 241 infantile deaths are shown in the following table :—

1930.
County of Aberdeen—Infantile Mortality.

Causes of Death.	DISTRICTS.								BURGHES.								Total.	
	Deer.	Ellon.	Garioch.	Deeside.	Turriff.	Aberdeen.	Alford.	Huntly.	Ballater.	Ellon.	Fraserburgh.	Huntly.	Inverurie.	Kintore.	Oldmeldrum.	Peterhead.		Rosehearty.	Turriff.
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Heart Disease	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Other Epidemic Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Tuberculous Meningitis	—	—	1	1	—	—	—	—	—	—	—	—	1	—	—	1	—	—
Tuberculosis of Respiratory System	1	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	1
Tuberculosis of Intestines and Peritoneum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Other Tuberculous Disease	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	1	—	3
Bronchitis	3	—	—	—	1	1	3	—	—	—	1	—	1	—	—	—	—	11
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Pneumonia	8	2	—	1	1	3	1	2	—	—	3	1	—	—	—	2	1	25
Other Diseases of Respiratory System	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	2
Diarrhoea and Enteritis	6	1	—	—	—	4	—	1	—	—	1	1	1	—	—	2	—	17
Nephritis	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Diseases of early Infancy and Malformations	14	15	10	9	15	9	5	6	—	—	9	4	6	—	2	21	1	130
Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Violent Deaths	—	—	1	—	—	1	1	1	—	—	—	—	1	—	1	1	1	7
Other defined diseases	6	3	1	2	2	3	2	1	—	—	3	—	—	—	—	5	1	30
Causes ill-defined or unknown	1	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	3
Totals	40	22	14	13	19	23	13	13	—	1	19	5	10	—	3	35	4	7 241

Maternal Mortality.

During the year 1930, there were 15 deaths of women from causes associated with pregnancy or child-birth.

Information regarding all these deaths was obtained from the attending medical practitioners, who co-operate in giving the desired information.

In one case, death followed abortion, in another, death took place before delivery, and in two others labour was stated to have occurred prematurely.

Eleven cases were attended by private practitioners and four were treated in public institutions. Seven of the patients died at home and 8 in public institutions.

Twenty-two cases of puerperal fever were notified. The number notified in 1929 was 27. Fourteen of the 22 cases notified were treated institutionally in the puerperal wards of Aberdeen City Hospital; of these, 3 died. Two of the 8 cases treated at home also died.

Nineteen cases of puerperal pyrexia were notified. The number notified in 1929 was 13. Of the 19 cases notified, 10 were treated in institutions in Aberdeen and 1 in a County hospital.

All the cases of puerperal fever and pyrexia were enquired into by the Regional Medical Officer for Mother and Child Welfare, and, where desired by the attending practitioner, were seen in consultation.

It may be reiterated that puerperal fever is compulsorily notifiable under the Infectious Diseases (Notification) Act, 1889, and that puerperal pyrexia is now also a notifiable disease. Puerperal pyrexia has been defined as "any febrile condition occurring within twenty-one days after child-birth or miscarriage in which a temperature of 100·4° F. or more has been sustained during a period of twenty-four hours, or has recurred during that period."

In this connection, most important original work was performed by Dr. J. Smith, Chief Bacteriologist, City Hospital, Aberdeen, and published with the title, "Causation and Source of Infection in Puerperal Fever." This treatise was sent to each medical practitioner in the County with the following covering letter:—

County Health Department,
4, Albyn Place,
Aberdeen, 22nd April, 1931.

Dear Sir,

Puerperal Fever—Sterilisation of Drums, &c.

On 31st January last, I sent you a copy of Dr. Smith's report, in which was emphasised the importance of the masking of attendants and the use of gloves in midwifery practice.

It has been suggested that a suitable outfit should consist of the following:—

- (1) One gown with sleeves.
- (2) A face-mask which, to be efficient, would require to have some impervious material, like rubber or jaconet, placed between layers of gauze. The mask would be attached to the head with tapes. A suitable mask is that described in the *British Medical Journal*, of 28th February last; the cost is 1s.
- (3) Gloves.
- (4) Small packet of French chalk.
- (5) Six towels.
- (6) Twenty gauze swabs.
- (7) Small packet of cotton wool.
- (8) Gauze—one wide strip (6 inches) and one narrow strip (3 inches) for packing purposes.

A drum, with this outfit, is on view at the Surgery, City Hospital, where interested practitioners may see it. With regard to the size of the drum, the most convenient dimensions appear to be 9½ inches by 13 inches; such a drum is listed by Messrs. Down Brothers at £2 2s.

Accordingly, arrangements have now been made whereby practitioners who may care to procure drums may have these with their contents sterilised, free of cost, at the Aberdeen City Hospital, where sterilisation is performed twice daily. The name of the general practitioner would require to be stamped on the drum.

In addition, a certain number of complete outfits will be available presently for emergency or special cases, and may be had on application to the Resident Medical Officer at the City Hospital.

Dr. Smith will gladly show practitioners a suitable type of mask and will discuss the various methods of sterilising rubber gloves.

Further information on this subject can be obtained from Dr. J. A. Stephen, Regional Medical Officer for Mother and Child Welfare (Tel. Nos.—Office, 4,196; House, Cults 169). The difficulty of carrying out this procedure in county practice is fully recognised, but the use of a coat, mask, and gloves is strongly advocated. The patient might be advised to procure a sterilised outfit, such as the Special Maternity Outfit, marketed by Messrs. T. J. Smith & Nephew, 5, Neptune Street, Hull, at a cost of 6s. A sample of this outfit may be seen in the Public Health Office at the above address.

Yours faithfully,

(Signed) HARRY J. RAE,
Medical Officer of Health.

Midwives (Scotland) Act, 1915.

The report for the year 1930 under the Midwives (Scotland) Act, 1915, which has already been transmitted to the Central Midwives Board, is herewith submitted.

The number of midwives who, during the year, intimated their intention to practise in the district was 7.

BIRTHS IN AREA OR DISTRICT.

Total Number of Births during 1930	Total Number of Deaths of New-born Children (within ten days) during 1930	Actual Number of Births attended by Midwives during 1930	Actual Number of Deaths of New-born Children (within ten days) occurring in the practice of Midwives during 1930	Actual Number of Cases not attended by a Doctor or Midwife during 1930	
				Births	Deaths
3075	77	200	12	2	1

CASES OF OPHTHALMIA NEONATORUM.

Total Number of Cases during 1930	Actual Number of Cases occurring in the practice of Midwives during 1930	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1930
11	1	—

CASES OF PUERPERAL SEPSIS.

Total Number of Cases during 1930	Total Number of Deaths during 1930 (Corrected for Transfers)	Actual Number of Cases occurring in the practice of Midwives during 1930	Actual Number of Deaths occurring in the practice of Midwives during 1930	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1930	
				Cases	Deaths
22	5	—	—	—	—

CASES OF PUERPERAL PYREXIA.

Total Number of Cases during 1930	Total Number of Deaths during 1930	Actual Number of Cases occurring in the practice of Midwives during 1930	Actual Number of Deaths occurring in the practice of Midwives during 1930	Actual Number of Cases occurring where confinement not attended by a Doctor or Midwife during 1930	
				Cases	Deaths
19	—	—	—	—	—

CASES OF STILL-BIRTH (DEAD BORN).

Total Number of Cases during 1930	Actual Number of Cases occurring in the practice of Midwives during 1930
22	11

CASES OF EMERGENCY.

Notifications were received from midwives of having in 30 cases sent for medical assistance. In all cases medical assistance was obtained. In 28 cases the assistance was required for the mother and in 2 cases for the child.

SUMMARY OF CASES.

1. During pregnancy,	0
2. During parturition,	26
3. After parturition,	2
4. For infant,	2
	—
Total,	30

£84 11s. 6d. was paid to doctors for the above services.

GENERAL REPORT ON THE WORKING OF THE ACT.

During the year the Act has worked smoothly in this area.

Provision of Foods.

During the year 25 mothers and 27 children were granted food and milk, and the total sum expended under this heading amounted to £100 11s. 6d.

Measles and Whooping Cough.

No definite arrangements were made for the institutional treatment of County children suffering from these diseases. Where necessity arose, accommodation could be provided either in one of the Infectious Diseases Hospitals or in the City Hospital, Aberdeen.

Ophthalmia Neonatorum.

Eleven cases of this disease were notified in 1930. Ophthalmia neonatorum became a compulsorily notifiable disease as from 1st November, 1918. This disease includes "any inflammation that occurs in the eyes of an infant within 21 days of birth and is accompanied by a discharge." It is very important to recognise ophthalmia neonatorum in the new-born at the earliest possible moment, for to wait the appearance of a marked purulent discharge is to multiply enormously the danger to the infant's vision.

All the eleven cases were notified by general practitioners—8 from the Districts and 3 from the Burghs. Of the 11 cases, 1 was treated in the Aberdeen City Hospital and the remainder at home. In no case was the vision impaired.

The dangers of this disease are so self-evident that it is unnecessary to state that, in most cases, and certainly in every case where a swab is positive, institutional treatment should be insisted on for the sake of both the child and the mother.

Epidemic Diarrhoea.

Seventeen deaths from diarrhoea and enteritis occurred amongst children under one year of age. Epidemic diarrhoea did not make its appearance in the County during the year under review.

Provision for Sick Children.

Ailing children under five years of age may be admitted to (1) the Aberdeen Royal Hospital for Sick Children, (2) Special Children's Wards of the Aberdeen City Hospital, and (3) Burnside Home, Aberdeen.

There is also available limited accommodation for children of this age in Linn Moor Convalescent Home, Culter.

Home-helps.

In 1930, one home-help was supplied by the County Council to a family, the mother of which had been removed to the Royal Asylum suffering from puerperal insanity.

Maternity Hospital and Ante-Natal Annexe.

Several years ago the County Council made an arrangement with the Maternity Hospital Directors to pay 30s. per week per County patient admitted to this institution.

In 1930, 101 County patients were treated in the Maternity Hospital and 48 in the Ante-Natal Annexe. The cost to the County was £133 7s. 6d., as compared with £128 18s. 7d. in 1929.

Educational Measures.

In 1930, there existed five Child Welfare Clinics, situated at Peterhead, Huntly, Inverurie, Bucksburn, and Ellon. Lectures were delivered by practitioners in the respective areas, by public health officials, by the district nurses and by others interested in the welfare of the mother and child.

The clinic at Peterhead is carried on in specially reconstructed premises in St. Peter Street. It is well organised and successfully run by an enthusiastic staff of voluntary workers and the official Health Visitor.

This clinic had been in operation for several years when it was taken over by the County Council in May, 1930.

Mother and Child Welfare Clinics cannot be conducted with success unless the general practitioners and the district nurses lend their hearty support. In our efforts we have received the unstinted support both of practitioners and nurses, and, in the evolution of the Scheme, there will be established a chain of clinics under the supervision of Dr. J. A. Stephen, Regional Medical Officer for Mother and Child Welfare.

One must put on record the invaluable service rendered by the voluntary workers throughout the County. Without their aid, official efforts would be more or less sterile.

Section IV.

SCHOOL MEDICAL SERVICES.

Number of Schools and Pupils.

The number of schools in the area is 236. The number of children on the register as at 31st July, 1930, was 25,943. The percentage of attendance was 92·4, as compared with 90·7 per cent. in the previous session.

Number of Visits to Schools.

The number of visits by the Medical Officers to schools for routine or systematic examination was 479. The number of special visits, that is, visits other than for purposes of systematic examination, was 498. The corresponding figures for 1928-29 were 483 routine and 507 special examinations.

THE PHYSICAL CONDITION OF THE SCHOOL CHILDREN.

A. Total Number of Children Examined—

(a) Systematic Examination—

Beginners	2,543
Nine-year-olds	3,125
Twelve-year-olds	2,412
Sixteen-year-olds	153
	8,233

(b) Special cases examined at special visits and re-examinations

7,990

Total 16,223

B. Number of children notified to parents as suffering from defects 2,104

Number placed under observation for re-examination at subsequent visits, without treatment being recommended

2,002

C. Number of Children receiving attention—

Out of 2,201 defects in children, excluding teeth, 1,418, *i.e.*, 64 per cent., received attention during the year.

In the following statements 8,233 is the number of pupils who underwent the full systematic examination, the only exception being the statement relating to visual acuity. The eyesight of entrants is not usually tested, and the total number of cases examined was 5,690, as compared with 5,254 in the previous session.

D. Clothing—

Clothing was found to be insufficient, dirty, or in bad repair in only 35, or 4 per cent. Three special cases were found to be unsatisfactory in this respect.

E. Footgear—

Footgear was found to be unsatisfactory in 9, or 1 per cent., and in 3 special cases.

F. Average Heights and Weights of Children—

TABLE I.

BOYS.					
No. of Children.		Average Age in years.		Average Height in inches.	Average Weight in lbs.
69	.....	$4\frac{7}{12}$	.....	39·4	38·5
811	.....	$5\frac{8}{12}$	.....	42·7	43·2
467	.....	$6\frac{5}{12}$	.....	44·4	46·1
62	.....	$7\frac{5}{12}$	.....	45·3	47·5
840	.....	$8\frac{6}{12}$	.....	47·6	51·8
672	.....	$9\frac{4}{12}$	.....	49·4	56·3
612	.....	$11\frac{7}{12}$	.....	51·4	69·4
617	.....	$12\frac{5}{12}$	.....	56·1	74·3
36	.....	$15\frac{8}{12}$	.....	64·5	119·2
30	.....	$16\frac{3}{12}$	.....	65·2	123·8

GIRLS.					
No. of Children.		Average Age in years.		Average Height in inches.	Average Weight in lbs.
45	.....	$4\frac{6}{12}$	.....	38·8	39·1
722	.....	$5\frac{5}{12}$	.....	42·6	43·2
420	.....	$6\frac{2}{12}$	.....	44·8	44·1
66	.....	$7\frac{4}{12}$	.....	45·4	47·5
831	.....	$8\frac{7}{12}$	.....	47·7	49·6
644	.....	$9\frac{3}{12}$	.....	51·3	56·1
607	.....	$11\frac{6}{12}$	.....	53·4	69·2
516	.....	$12\frac{3}{12}$	.....	56·5	75·3
51	.....	$15\frac{7}{12}$	.....	64·7	110·2
36	.....	$16\frac{6}{12}$	.....	65·6	115·9

G. Cleanliness of Head and Body—

(a) Head—

Dirty or Nits	.	.	.	.	459 or 5·5 per cent.
Verminous	.	.	.	.	59 or ·7 „
Special cases	.	.	.	.	89

(b) Body—

Dirty	.	.	.	.	38 or ·4 „
Verminous	.	.	.	.	29 or ·3 „
Special cases	.	.	.	.	31

H. Condition of Skin—

(a) Head—

Ringworm	.	.	.	2 or ·02 per cent.
Impetigo	.	.	.	57 or ·7 „
Favus	.	.	.	— —
Other diseases	.	.	.	2 or ·02 „
Special cases	.	.	.	16

(b) Body—

Ringworm	.	.	.	1 or ·01 „
Impetigo	.	.	.	1 or ·01 „
Scabies	.	.	.	5 or ·05 „
Other diseases	.	.	.	— —
Special cases	.	.	.	3

I. Nutrition—

Above average	.	.	.	890 or 10·8 „
Average	.	.	.	7,025 or 85·7 „
Below average	.	.	.	357 or 4·3 „
Very bad	.	.	.	— —
Special cases	.	.	.	3

J. Teeth—

Sound	1,037 or 12·6	per cent.
1-4 Decayed	6,188 or 75·5	„
5 or more Decayed	927 or 11·2	„
Oral sepsis	25 or ·3	„
Special cases	31	

K. (a) Nose—

Catarrh	242 or 2·9	„
Obstruction	1 or ·01	„
Other diseases	—	—
Special cases	2	

(b) Throat—

Tonsils—

Slightly enlarged	1,096 or 13·3	„
Markedly enlarged	113 or 1·3	„

Adenoids—

Probably present	120 or 1·3	„
Present	5 or ·05	„
Other diseases	85 or 1·3	„
Special cases	126	

(c) Lymphatic Glands—

1. Submaxillary—

Palpably enlarged	1,441 or 17·5	„
Markedly enlarged	5 or ·05	„
Suppurating	—	—
Cicatrices	21 or ·2	„

2. Cervical—

Palpably enlarged	590 or 7·1	„
Markedly enlarged	2 or ·02	„
Suppurating	—	—
Cicatrices	26 or ·3	„
Special cases	21	

L. External Eye Diseases—

Blepharitis	71 or ·8	„
Conjunctivitis	16 or ·2	„
Corneal opacities	9 or ·09	„
Squint	105 or 1·2	„
Other diseases	16 or ·1	„
Special cases	17	

M. Visual Acuity (number examined 5,690)—

Good vision	5,031 or 88·2	„
Fair vision	480 or 8·4	„
Bad vision	179 or 3·1	„
Special cases	81	

(The vision of entrants is not tested.)

N. Ears—

Otorrhoea	45 or ·5	„
Wax	10 or ·1	„
Other diseases	5	

O. Hearing—

Slightly deaf . . .	17 or	·2	per cent.
Markedly deaf . . .	—	—	
Special cases . . .	3		

P. Speech—

Defective articulation . . .	25 or	·3	„
Stammering . . .	13 or	·1	„
Special cases . . .	6		

Q. Mental Condition—

Backward . . .	54 or	·6	„
Mentally defective . . .	5 or	·05	„
Special cases . . .	51		

R. Heart and Circulation—

Acquired organic disease . . .	57 or	·6	„
Congenital organic disease . . .	16 or	·2	„
Functional disease . . .	81 or	1	„
Anæmia . . .	136 or	1·6	„
Special cases . . .	14		

S. Lungs—

Chronic bronchitis . . .	44 or	·5	„
Tuberculosis . . .	—	—	
Suspected tuberculosis . . .	2 or	·02	„
Other diseases . . .	78 or	·9	„
Special cases . . .	23		

T. Nervous System—

Epilepsy . . .	2 or	·02	„
Chorea . . .	1 or	·01	„
Paralysis . . .	5 or	·05	„
Other diseases . . .	2 or	·02	„

U. Tuberculosis (Non-pulmonary)—

Glandular . . .	15 or	·2	„
Bones and joints . . .	3 or	·03	„
Abdominal . . .	—	—	
Skin . . .	—	—	
Other forms . . .	1 or	·01	„
Special cases . . .	4		

V. Rickets—

Slight rickets . . .	47 or	·5	
Marked rickets . . .	3 or	·03	
Special cases . . .	—		

W. Deformities—

Congenital . . .	37 or	·4	„
Acquired . . .	15 or	·2	„
Special cases . . .	2		

X. Infectious and Contagious Diseases

Special cases . . .	69 or	·8	„
	36		

Y. Other Diseases and Defects

Special cases . . .	246 or	2·9	„
	53		

Eye Treatment.

Dr. Galloway examined 618 cases at eighteen centres.

Centres Visited.	Number of Cases Treated.
Aberdeen	69
Aboyne	31
Ballater	12
Huntly	39
Insch	22
Oldmeldrum	22
Turriff	37
Ellon	50
Strichen	16
Maud	23
Fraserburgh (Burgh)	73
Fraserburgh (District)	21
Peterhead	104
Kemnay	14
Inverurie	21
Alford	25
Aboyne and Ballater (second visit)	28
Bucksburn	11
Total	618

Analysis of cases :—

Spectacles ordered	524
Spectacles satisfactory or unnecessary	85
Congenital cataract	1
Ptosis adiposa	1
Corneal nebulae	2
Hordeolum	1
Interstitial keratitis	1
Conjunctivitis	1
Congenital coloboma (Iris and Choroid)	1
Sequelæ of ophthalmia neonatorum	1
Total	618

In those children for whom spectacles were prescribed, the various errors occurred in the following proportions :—

Hypermetropia	241 = 45·99 per cent.
Hypermetropic astigmatism	123 = 23·47 „
Myopia	62 = 11·83 „
Myopic astigmatism	65 = 12·40 „
Mixed astigmatism	33 = 6·29 „

Convergent strabismus occurred in 16·5 per cent. of the cases of hypermetropia, and in 4 per cent. of the cases of hypermetropic astigmatism.

The following conditions were found associated with refractive errors :—albinism (1 case); corneal nebulae (2 cases); traumatic cataract (2 eyes in 2 cases); blepharitis (4 cases); adherent leucoma (1 eye); posterior polar cataract (1 case); dermoid cyst of each eye (1 case).

Two cases of high myopia of -10D at 7 years of age; 1 of -9D at 5 years of age; and 1 case of 6 years of age with right eye -11D and left eye -9D were notified as requiring special supervision with regard to near work and lessons.

Dental Inspection and Treatment.

<i>Inspections—</i>	Whole-time Dentists.	Part-time Dentists.
Number of schools inspected . . .	128	31
Number of scholars inspected . . .	9,139	2,689
Number of scholars with sound teeth . . .	3,090	732
Percentage with sound teeth . . .	33·8%	29·1%
Number of cases where parents were notified	6,049	1,957
Number of consents . . .	3,690	1,160
Percentage of consents received . . .	61·1%	59·2%
<i>Treatment—</i>		
Number of schools visited . . .	110	35
Number of children recommended by School Dentists and treated . . .	3,641	—
Total number of children treated, including “ specials ” . . .	3,874	839
Number of extractions—		
(Temporary) . . .	4,558	1,181
(Permanent) . . .	1,527	249
Number of fillings—		
(Temporary) . . .	338	114
(Permanent) . . .	2,213	478
Amount of fees received . . .	£86 0 6	

Section V.

TUBERCULOSIS SERVICES.

SURVEY OF COUNTY TUBERCULOSIS SCHEME.

Before the passing of the National Insurance Acts, there was no organised provision in the County for the treatment of persons suffering from tuberculosis. The scheme was inaugurated in 1913. It had small beginnings, and, during the past seventeen years, considerable progress has been made, such as, the provision of institutional accommodation for pre-tuberculous children, of remedial exercises and massage for certain cases suffering from non-pulmonary tuberculosis, and of special methods of treatment by heliotherapy and artificial light.

The scheme includes the eight Districts of the County and the ten Burghs. The institutional accommodation provided can now be regarded as adequate. The County Council do not possess any institutions of their own. Patients are admitted from the County to the following institutions :—

(a) For Pulmonary Cases—

1. Aberdeen City Hospital.
2. Newhills Sanatorium, Bucksburn.
3. Noranside Sanatorium, Brechin.
4. Peterhead Burgh Hospital.
5. Thomas Walker Hospital, Fraserburgh.

(b) For Non-pulmonary Cases—

1. Woodend Hospital, Aberdeen.
2. Inch and District War Memorial Hospital, Inch.
3. Kincardine O'Neil War Memorial Hospital, Torphins.

(c) For Pre-tuberculous Children—

Linn Moor Convalescent Home, Culter.

With regard to pulmonary cases, special treatment, for example, artificial pneumothorax and thoraco-plasty, is performed both at the City and Woodend Hospitals.

For many years, the absence of proper provision for non-pulmonary tuberculosis was keenly felt, but this defect was remedied when, in 1928, the Aberdeen Town Council agreed to admit cases from Aberdeenshire to Woodend Municipal Hospital. This type of tuberculosis is largely preventable and in many cases its origin is the bovine type of tubercle bacillus. In this connection, an extension of the veterinary services, with the slaughter of cows yielding tuberculous milk, would undoubtedly lessen the incidence of this maiming disease.

Special reference must be made to the excellent work which is being carried out at Linn Moor Convalescent Home, Culter. In 1924, the County Council came to an arrangement with the Managers of this Home whereby County children suffering from intra-thoracic adenitis, from non-infectious pulmonary tuberculosis or from what may be called pre-tuberculous conditions would be received for treatment. Children of from three to thirteen years of age are admitted and the Council have a claim on 27 of the total beds which number 62. The Home is one of the most valuable institutions of its kind. It is run on

purely preventive lines. It is a "preventorium" in the true sense of the term. The children are taught ordinary school work by a qualified teacher, and receive remedial exercises, graduated according to their physical condition, from the remedial expert. The teacher is supplied by the Town Council whereas the remedial expert is a servant of the County Council.

In addition to institutional treatment, the County Scheme has two very important aspects in its domiciliary treatment and its dispensaries.

It will thus be seen that the Tuberculosis Scheme, as operating in Aberdeenshire, is as comprehensive and complete as present conditions will allow. Prior to the war, the County Council were urged by the Local Government Board to combine with neighbouring Local Authorities and build a sanatorium, but, in 1915, the Board issued instructions that no new buildings should be proceeded with during the war. After the war, the newly-constituted Scottish Board of Health advised the Council to proceed with the erection of a sanatorium but the Council wisely desisted from so doing.

To summarise, under the County Scheme there is adequate sanatorium and hospital accommodation and a waiting list is practically unknown. Conservative dental treatment is given to cases undergoing institutional treatment by the two County dentists whose chief functions are connected with school children. There are Tuberculosis Dispensaries in the more thickly populated areas and there is an extensive system of domiciliary treatment which includes the supply of shelters and of food substances to selected cases.

STATISTICS.

Number of Notifications.

The total number of cases notified was 255, as compared with 254 in 1929. In addition to the 255 primary notifications, there were 9 "transfers," that is, patients who, having been found to be suffering from tuberculosis in other areas and having been notified to the Medical Officers of Health of those areas, were again notified to the County Medical Officer of Health on coming to reside in Aberdeenshire. There were also 16 re-notifications of cases who had been previously notified in the County, or had been notified by more than one practitioner.

Of the 255 cases notified, 113 suffered from pulmonary tuberculosis and 142 from non-pulmonary tuberculosis. The distribution of these cases in age and sex groups appears in Table I.

TABLE I.

Number of Cases notified as suffering from Tuberculosis in 1930.

		Under 5.	5 and under 10.	10 and under 15.	15 and under 25.	25 and under 35.	35 and under 45.	45 and under 65.	65 and upwards.	Total.
Pulmonary	Males .	1	2	5	14	11	11	13	3	60
	Females	—	1	3	15	13	11	10	—	53
Non-Pulmonary	Males .	17	24	4	12	9	1	1	—	68
	Females	14	13	11	13	13	5	3	2	74
Total		32	40	23	54	46	28	27	5	255

The number of pulmonary cases shows a steady decline, but the number of non-pulmonary cases continues to increase. This is mainly due to the more complete notification of the minor forms of non-pulmonary tuberculosis. These affections, although not as a rule dangerous to life, are of considerable economic importance, necessitating, as they usually do, hospitalisation for some time. It is a well-known fact that infection from the milk of tuberculous cows is a common cause of non-pulmonary tuberculosis and a history of such infection was obtained in a significant number of cases.

Sources of Notifications.

The sources of the notified cases were as follows :—

1.	Notified by General Practitioners	240
2.	„ Medical Officers of Medical and Surgical Hospitals	7
3.	„ Medical Officers of Mental Institutions	7
4.	„ County Medical Officer of Health	1
5.	„ Medical Officers of Health and of other areas (“Transfers”)	9
6.	“ Re-notifications ”	16
	Total	<u>280</u>

Localisation of Disease.

The parts of the body affected in the 142 non-pulmonary cases were :—

1.	Glands	89
2.	Bones and joints	24
3.	Brain membranes	9
4.	Abdomen	10
5.	Other sites (including lupus)	10
	Total	<u>142</u>

Occupational Incidence.

No special predisposing occupational factors exist in Aberdeenshire.

Of the 255 primary notifications, 128 were males. Of these, 34 were school-boys, 13 were farm workers and 8 were general labourers. There is an increase in the number of sufferers of school age and this is due chiefly to an increased notification of tuberculous neck glands.

With regard to female notifications, there were 127, of whom 32 were housewives, 28 were schoolgirls and 18 domestic servants. This year, as in the two previous years, there was a decrease in the number of housewives notified as tuberculous.

Mortality.

The number of cases who were notified in 1930, and who died before the end of the year was 28. The percentage of deaths to notifications within the year was 11, as compared with 9·8 in 1929, 10·9 in 1928, 11 in 1927, and 13·5 in 1926.

All forms of tuberculosis accounted for 108 deaths, and of these 66 were pulmonary and 42 non-pulmonary deaths. The total number of deaths in 1929 was 113, in 1928—139, in 1927—132, in 1926—107, and in 1925—144.

The total number of deaths from tuberculosis in the County, namely, 108, represents a death-rate of 72·8 per 100,000. The 60 deaths attributable to pulmonary tuberculosis represents a death-rate of 40·5 per 100,000.

Throughout Scotland, in 1929, deaths from all forms of tuberculosis numbered 4,285, equivalent to a death-rate of 88 per 100,000. Of the 4,285 deaths, 3,024 were ascribed to tuberculosis of the lungs, and this number equals a death-rate of 62 per 100,000.

The following table shows the total number of deaths in the whole County from all causes, the deaths from pulmonary and non-pulmonary tuberculosis, and the deaths from all respiratory diseases, excluding phthisis :—

TABLE II.

	Total Number of Deaths.	Deaths from			Percentage of Deaths from Tuberculosis to Total Deaths.	Percentage of Deaths from all Respiratory Diseases (except Phthisis) to Total Deaths
		Tuberculosis.		All Respiratory Diseases (except Phthisis).		
		Pulmonary.	Non- Pulmonary.			
COUNTY DISTRICTS—						
Deer	341	16	9	41	7·3	12
Ellon	138	2	2	12	2·9	8·6
Garioch	134	6	4	17	7·5	12·6
Deeside	136	4	2	12	4·4	8·8
Turriff	114	1	2	8	2·6	7·02
Aberdeen	301	13	6	26	6·3	8·6
Alford	95	3	1	12	4·2	12·6
Huntly	66	2	3	9	7·6	13·6
BURGHAL DISTRICTS—						
Ballater	20	2	—	2	10	10
Ellon	20	1	—	1	5	5
Fraserburgh	104	5	—	18	4·8	17·3
Huntly	50	2	1	3	6	6
Inverurie	71	1	4	6	7·04	8·5
Kintore	10	—	—	1	—	10
Oldmeldrum	15	—	—	1	—	6·7
Peterhead	160	6	7	12	8·1	7·5
Rosehearty	25	—	—	3	—	12
Turriff	56	2	1	8	5·4	14·3
Total	1,856	66	42	192	5·8	10·3
Corresponding figures for 1929	2,029	80	33	240	5·6	11·8

In Table III. are given the ages at death, in five age-groups, amongst pulmonary deaths during the past six years.

TABLE III.

Age Groups.	1930.	1929.	1928.	1927.	1926.	1925.
Under 15 years	5 ... 5 ... 3 ... 5 ... 6 ... 36					
15 years—25 years	18 ... 13 ... 31 ... 20 ... 18 ... 28					
25 „ —45 „	26 ... 37 ... 44 ... 47 ... 34 ... 31					
45 „ —65 „	17 ... 20 ... 21 ... 25 ... 19 ... 17					
Over 65 years	— ... 5 ... 3 ... 5 ... 3 ... —					
Total	66 ... 80 . 102 ... 102 ... 80 ... 112					

TREATMENT.

1. Institutional Treatment.

The distribution of the 255 primary cases is shown in Table IV.

TABLE IV.

	Pulmonary.			Non-pulmonary.	
A. Admitted to approved institutions .	62	—	...	58	—
B. Not admitted to approved institutions because—					
(1) Refused to go to institutions .	—	—	...	—	—
(2) Died before commencement of institutional treatment .	—	3	...	—	—
(3) Inmates of asylum, &c. .	—	9	...	—	—
(4) Inmates of voluntary hospitals .	—	—	...	—	6
(5) Visitors or left area .	—	2	...	—	—
(6) Unsuitable for institutional treatment or such treatment not required .	—	45	...	—	55
(7) Awaiting institutional treatment at end of year .	—	5	...	—	10
	62	64	...	58	71
Total .	126	...	...	129	...

From Table IV., it will be seen that 120 of the notified primary cases received institutional treatment, but the actual number of new cases treated in 1930 includes—

- (1) Those who may have been notified in previous years but who received institutional treatment for the first time in 1930.
- (2) Patients sent to Tuberculosis Institutions for diagnostic purposes only.
- (3) Patients sent to Linn Moor Convalescent Home, Culter. Practically none of these are notified cases.

In the following table is given the distribution in sanatoria and hospitals of those primarily notified in 1930, of those who were notified prior to 1930 but who received treatment for the first time in that year and of observation and pre-tuberculous cases :—

TABLE V.

Institutions.	Insured.		Uninsured.		Total.
	Male.	Female.	Male.	Female.	
Sanatoria	5	4	3	8	20
Hospitals	31	19	32	48	130
Linn Moor Convalescent Home	—	—	16	14	30
Total	36	23	51	70	180

Duration of Treatment.

Taking into account those patients who completed treatment before the end of 1930, we find that the average duration of stay in institutions was 212 days, as compared with 224 days in 1929. Since 1914, the shortest average duration of stay in institutions was in 1917, with 131 days, and the longest in 1922 and 1925, with 225 days each.

Dental Treatment.

The whole-time school dental surgeons periodically visit Tuberculosis Institutions and give dental treatment mostly of a conservative character. Their work during 1930 is given in Table VI.

TABLE VI.

Name of Institution.	Number of Patients who received Treatment by—			
	Extraction.	Filling.	Scaling.	Total.
Newhills Sanatorium	4	2	9	15
Noranside Sanatorium	5	—	3	8
Linn Moor Convalescent Home	26	6	6	38
Thomas Walker Hospital, Fraserburgh	5	3	6	14
Peterhead Burgh Hospital	2	—	3	5
Total	42	11	27	80

2. Domiciliary Treatment.

Domiciliary treatment includes supervision of tuberculous patients by the family doctor, by the Tuberculosis Medical Officer and by the District Nurses. Domiciliary treatment is really only effective when it is preceded by a course of treatment in a Tuberculosis Institution.

The County Council possesses 60 open-air shelters which are lent free to tuberculous patients. Experience has shown that only post-institutional cases use these shelters to the best advantage. In 1930, 69 patients had the use of shelters—30 males and 39 females.

Additional nourishment, consisting of milk, eggs, butter and meat, was supplied to 64 patients at a total cost of £360 7s. 7d.

Special drugs are also supplied and the total cost of these amounted to £223 5s. 3d., as compared with £229 3s. 4d. in 1929.

3. Dispensary Treatment.

There are 6 Dispensaries operating at the following centres :—The Central Dispensary at 4, Albyn Place, Aberdeen, and branch Dispensaries at Huntly, Inverurie, Peterhead, Fraserburgh and Bucksburn. At the Central Dispensary, patients are examined every Friday, and at the branch Dispensaries clinics are conducted fortnightly. In the following table are given the numbers who attended the individual clinics and also the total number of visits to these clinics :—

TABLE VII.

Dispensary.	Number of Patients.	Total Number of Visits.
1. Central	90	153
2. Huntly	42	186
3. Inverurie	35	120
4. Peterhead	60	117
5. Fraserburgh	40	126
6. Bucksburn	50	100
Total	317	802

In 1930, 144 radiograms of the chest and 151 of other parts of the body were taken at Woodend and City Hospitals. The corresponding figures in 1929 were 114 chest radiograms and 135 of other parts of the body. Particulars relating to these radiograms are given in the subjoined table :—

TABLE VIII.

Site of Disease.	Number of—		Total.
	Indoor Patients.	Outdoor Patients.	
Pulmonary . . .	81	63	144
Non-pulmonary . . .	121	30	151
Total . . .	202	93	295

Section VI.

NURSING SERVICES ... ..	46

The County Nursing Association was formed in 1921. There were then 24 District Nursing Associations, each employing one nurse, and these Associations became affiliated with the newly formed County Nursing Association. There are now 38 District Nursing Associations and each of these employs one nurse, with the exception of Stoneywood District Nursing Association which employs two nurses. The great majority of District Nursing Associations have employed Jubilee Nurses and these Associations are therefore further affiliated with the Queen's Institute of District Nursing, Edinburgh. All Jubilee Nurses are fully trained and have, in addition, had maternity experience, but as they act as part-time Health Visitors it would be very advantageous if they received a regular course of training in health visiting work before undertaking district work in the County.

The question as to whether or not a district nurse should engage in health visiting is a very controversial problem, and there are two distinct schools. Some say that a district nurse should not act as health visitor and that the services of a whole-time health visitor should be enlisted. There are, however, several advantages to be gained in the district nurses performing health visiting work, and the chief of these are:—(1) By the nurses performing the manifold duties required, the work is centralised and there is economy both in time and money, and what is most important, friction and overlapping are avoided; (2) the district nurse already knows the mothers and can obtain their sympathy somewhat more readily than can a full-time health visitor; (3) if the district nurse is the only nurse visiting the home, then there can be no encroachment on the privacy in the home: on the other hand, the visitation of the home by the district nurse, health visitor, tuberculosis nurse and school nurse in different persons must lead to confusion of advice, and what then happens in such cases is that the advice given is entirely ignored.

Official Duties of the District Nurses.—As already stated, it has been found expedient, and, indeed, necessary to unite the duties of the district nurse so that they include not only the district nursing of the sick generally, but also duties under such statutory schemes as the Mother and Child Welfare Scheme, the Tuberculosis Scheme and the Scheme for the Medical Inspection and Treatment of School Children.

A district nurse so employed is not allowed to attend cases suffering from ordinary infectious disease, but in the course of her daily round she should always be on the look-out for the occurrence of such diseases and be able to make a provisional diagnosis of the commoner notifiable diseases. In actual practice, the district nurse has usually gained considerable experience in the diagnosis of such non-notifiable diseases as measles and whooping cough. This is very important because, undoubtedly, many mothers still regard measles and whooping cough as diseases of no importance.

It is perhaps under the Maternity Service and Child Welfare Scheme that the work of a rural district nurse is most appreciated. As a rule, she is called in by the doctor at the confinement, but if this is not the case, then she is instructed by the Medical Officer of Health to visit the mother and child ten days after the confinement. The Medical Officer of Health issues instructions to the district nurses as to the necessary frequency of visitation. A sound working scheme of frequency is as follows:—(1) During the first ten days ordinary visits should be performed; (2) during the first month two visits should be made; (3) after this period, if the child is healthy, visit every six weeks

until the end of the first year; (4) during the second and third years visitation should be made every quarter; (5) during the fourth and fifth years visitation should be made twice yearly. The whole idea of this scheme of visitation is that the child should be under the eye of the district nurse from birth until it attains school age. Then from the age of five to fourteen the child again comes under the eye of the nurse under the Scheme for the Medical Inspection and Treatment of School Children.

In connection with tuberculosis, the district nurse has a very definite rôle. She visits sufferers either at the request of the family doctor or of the official Medical Officer. She can do a tremendous amount of good work because it is mainly through the nurse that we hope to be able to allay the spread of disease in advanced cases. It is no unusual thing to find that a patient goes to a sanatorium for, say, a year, returns home in an advanced condition, and, even after all the trouble that has been taken to instruct him as to how to minimise the risk of infection to others, he is quite careless as to the disposal of sputum. The district nurse in visiting such cases can give invaluable advice.

As regards the School Medical Services, the district nurses carry out very valuable work. They are present at the routine examinations performed by the Medical Officers and are present at special visits made by the school oculist and the school dentists. They also make special "surprise" visits to the schools in their areas, chiefly with a view to detecting verminous cases, and the most unpleasant and thankless statutory duty performed by the nurses is the following-up of verminous children. The most important part of their work in connection with the school service is the "following-up" of children who, either at the routine or special examinations of the Medical Officers, are found to be defective.

Financial Arrangements.—A grant of £80 per annum is made to each recognised District Nursing Association in respect of the statutory work performed by the nurse. This sum is allocated as follows:—£40 for work under the Maternity Service and Child Welfare Scheme and two sums of £20 each under the Scheme for the Medical Inspection and Treatment of School Children and the Tuberculosis Scheme. In addition to these payments to District Nursing Associations, an annual payment of £40 has been made for the services of the Peterhead Health Visitor in connection with school work. A grant of £20 annually is also made to the Peterhead Hector Sick Nursing Institute in return for visitation by their nurse of tuberculous domiciliary patients in the burgh of Peterhead.

A number of district nurses are now the possessors of small cars, and this method of transport has been found to be much more satisfactory than travelling by motor or push cycle.

The Future of District Nursing in Aberdeenshire.—The nursing services in Aberdeenshire, although fairly comprehensive, are not complete. There is an appreciable area which yet remains to be covered and the County will never have a thoroughly adequate nursing service until there is a complete network of nurses. Compared with other rural areas, however, Aberdeenshire is comparatively well equipped as regards its nursing services, and an extension of these services can only take place very gradually and must depend more or less on the economic conditions prevailing.

Section VII.

THE TREATMENT OF VENEREAL DISEASES ... ..	48

During 1930, the arrangements for the treatment of venereal diseases were similar to those described in previous Annual Reports. Under the Public Health (Venereal Diseases) Regulations (Scotland), 1916, Local Authorities were empowered to frame schemes for the prevention, diagnosis and treatment of venereal diseases. A combined scheme, including the City of Aberdeen, became operative in May, 1919, and in 1922 the Counties of Zetland and Orkney became contributors in this Joint Scheme.

Although the scheme is definitely framed to include prevention, the only side meantime likely to prove effective is that relating to treatment, and patients ought, in the public interest, to continue treatment until free from infection, and, in their own interest, until cure is effected. There is at present no adequate control of venereal diseases, although endeavours were made in 1924 by several Local Authorities to have venereal diseases made compulsorily notifiable in virtue of powers conferred by Section 78 of the Public Health Act.

The treatment centres of the Joint Venereal Diseases Scheme function at the Aberdeen Royal Infirmary and the Aberdeen City Hospital.

Number of New Cases.—The number of new cases attending for treatment since 1925 was as follows:—

1925	.	.	.	.	.	.	.	94 new cases.
1926	.	.	.	.	.	.	.	96 „
1927	.	.	.	.	.	.	.	98 „
1928	.	.	.	.	.	.	.	108 „
1929	.	.	.	.	.	.	.	131 „
1930	.	.	.	.	.	.	.	124 „

Of the 124 new cases treated in 1930, 29 suffered from syphilis, 72 from gonorrhœa, 1 mixed infection and 22 from conditions other than venereal. Ninety-one were males and 33 females. The County figures show that almost twice as many men as women apply for treatment at the clinics. In 1929, the total number of new cases treated was 131, of whom 40 suffered from syphilis and 61 from gonorrhœa.

Number of New Cases Treated in Institution.—Twenty-two cases were admitted to the special wards of the Aberdeen Royal Infirmary. Of these, 12 were men and 10 women. Seven suffered from syphilis and 15 from gonorrhœa. The relative number of new cases treated institutionally during the past six years:—

1925	.	.	.	.	.	.	.	16 cases.
1926	.	.	.	.	.	.	.	15 „
1927	.	.	.	.	.	.	.	20 „
1928	.	.	.	.	.	.	.	31 „
1929	.	.	.	.	.	.	.	25 „
1930	.	.	.	.	.	.	.	22 „

Number of Attendances of Outdoor Cases at Treatment Centre.—In the year under review, the total number of attendances at the Treatment Centre was 3,930, as compared with 3,227 in 1929, 3,061 in 1928, 3,301 in 1927, and 2,231 in 1926.

Supply of Special Drugs for Syphilis.—In 1930, 136 doses were supplied to fourteen practitioners. The figures relating to the past six years are shown hereafter :—

YEAR.	INSTITUTIONS.		PRIVATE PRACTITIONERS.	
	Number of Institutions.	Number of Doses.	Number of Practitioners.	Number of Doses.
1925	—	—	10	46
1926	—	—	36	288
1927	—	—	13	92
1928	3	62	21	120
1929	3	48	24	161
1930	—	—	14	136

Laboratory Examinations.—The total number of County laboratory examinations performed since 1925 in connection with the Venereal Diseases Scheme is as follows :—

1925	850 examinations.
1926	1,014 ..
1927	1,130 ..
1928	1,207 ..
1929	1,161 ..
1930	1,361 ..

In 1930, the Wassermann Reaction was performed in 811 cases, of whom 319 were positive. The exudate was examined in 5 cases, and of these, 1 was positive. Examination for the gonococcus was made in 545 instances, and in 96 positive results were obtained.

Of the 1,361 specimens examined, 47 were sent by private practitioners.

“Incomplete Cases.”—Every year a proportion of cases fails to complete treatment, and, unfortunately, owing to lack of legislative control, patients may avail themselves of treatment but may discontinue it at will, irrespective of the degree of infectiousness or of the occupation. Many patients think that the disease is cured whenever the evident physical symptoms disappear, but in this they are absolutely wrong, for cases imperfectly treated may ultimately develop such diseases as locomotor ataxia or general paralysis of the insane. The great defect in all Venereal Diseases Schemes is that there is no power to enforce continuity of treatment until the patients are free from infection or are cured.

In 1930, only 9 patients failed to complete treatment—1 male and 1 female suffering from syphilis and 6 males and 1 female from gonorrhœa. The numbers who failed to complete treatment in the previous five years were :—1929—13; 1928—7; 1927—14; 1926—20; 1925—24.

Section VIII.

BACTERIOLOGICAL SERVICES ... ..	50

Report on Bacteriological Work performed in the County Bacteriological Laboratory during the year ending 31st December, 1930, by Dr. J. F. Tocher, Director of the County Bacteriological Laboratory.

I beg to report on the work performed in the County Bacteriological Laboratory, Crown Mansions, 41½, Union Street, Aberdeen, for the year ending 31st December, 1930.

During the year 6,432 specimens were received for examination, of which 5,904 were from Public Health sources, while 528 specimens were received under the Tuberculosis Scheme for the County.

Examinations for B. Diphtheriæ.

4,981 swabs were examined for *B. diphtheriæ*. General practitioners had 725 swabs examined, of which 161 swabs were positive. The County Medical Staff had 527 swabs examined, of which 40 swabs gave positive results. From the hospitals in the County 3,729 swabs were examined, of which 787 swabs were positive.

Table I. shows the source of the swabs and the results obtained.

TABLE I.

	Total.	Positives. Throat.	Nose.	Negatives.	Total.
General Practitioners	161	154	7	564	725
County Medical Officers	40	29	11	487	527
County Hospitals	787	573	214	2,942	3,729
Totals	988	756	232	3,993	4,981

Examinations for B. Typhosus and Allied Organisms.

504 specimens were examined for organisms of the "enteric" group and for agglutinating properties towards the organisms of that group.

Fæces.—241 specimens of fæces were examined for *B. typhosus* and allied organisms. 66 samples were sent by general practitioners, one of which gave positive results for *B. paratyphosus B.*, while 2 specimens showed the presence of *B. dysenteriæ* Sonne. From the County hospitals 174 fæces were received, 9 of which were positive for *B. typhosus*, and 45 specimens gave positive results for *B. paratyphosus B.* A sample of fæces sent by the County Medical Officer gave negative results.

Urines.—For general practitioners 17 samples of urine were examined, all of which were negative. 187 urines were examined from the County hospitals, 17 of which were positive for *B. typhosus* while 6 urines were positive for *B. paratyphosus B.* A sample of urine sent by the County Medical Officer was negative.

Widals.—64 bloods were examined for the Widal reaction, of which 2 were positive for *B. typhosus* and 18 positive to *B. paratyphosus B.*

Blood Cultures.—4 blood cultures for organisms of the "enteric" group were made, all of which were negative.

General Examinations.

General bacteriological or chemical examinations were made on 419 specimens of various kinds.

Urines.—77 urines were examined for *B. coli*, of which 48 were positive. 6 urines were examined for glucose with 2 positive results. 8 urines were examined for albumen, of which 5 were positive. A sample of urine showed streptococci to be present. 3 urines were examined for the presence of casts and oxalates, while the urea content of a sample was estimated.

Fæces.—12 specimens of fæces were examined for occult blood, 3 specimens being positive.

Blood.—61 blood films were examined from cases of pernicious anæmia and 40 films from cases of simple anæmia. Blood counts were made from 12 specimens of blood. 2 blood films gave positive results for malaria and the blood urea was estimated in a sample.

Pus.—59 specimens of pus were examined for the causal organisms. Streptococcus was the causal organism in 15 specimens, staphylococcus aureus in 11 specimens, while a sample of pus showed *B. acne* to be the organism present. 32 specimens of pus were examined for gonococci with 16 positive results.

Pleural Effusions.—7 pleural effusions were examined for causal organisms, in 3 of which pneumococci were present and in a specimen the streptococcus was the causal organism. 3 effusions were sterile.

Anthrax.—2 blood smears and 2 cultures gave positive results for *B. anthracis*.

Vaccines.—24 autogenous vaccines were prepared from samples of pus, urine, &c.

Waters.—3 samples of water were examined bacteriologically and were found to be of a satisfactory standard.

Miscellaneous.—Scrapings from a scalp and some hairs showed the presence of ringworm. A rat was examined for *Leptospira* with negative results. A tape-worm was found to be *Tænia saginata*. 9 tumours were examined, 1 of which was of a malignant type.

Examinations of Milk.—50 samples of milk were examined for *B. tuberculosis*, of which 8 were positive and 42 samples negative. 8 samples of milk were examined for streptococci with 3 positive results.

Milk counts were performed on 27 samples of milk, all of which were of excellent quality. A sample of human milk was examined chemically for butter fat.

The following table (Table III.) shows the general examinations made during the year:—

TABLE III.

	B. Coli.		Streptococci.		Chemical.		Total.	
	+	—	+	—				
Urines	48	29	1	—	18			96
Fæces Blood	3	9						12
	Anæmia.		Pernicious Anæmia.				Counts.	Urea.
					+	—		
Bloods	40	61	2	—	12		1	116
	Strep- tococci.		Staphy- lococci.					
			B. Acne.		Gonococci.			
					+	—		
Pus	15	11	1		16	16		59
	Pneumococci.		Streptococci.					
	+	—	+	—				
Pleural Effusions	3	2	1	1				7

	T.B.		Streptococci.		Counts.	Chemical.
	+	—	+	—		
Milks	8	42	3	5	27	1 86
	Smears.		Cultures.			
	+	—	+	—		
Anthrax	2	—	2	—		4
Waters						3
Vaccines						24
Miscellaneous						12
					Totals	419

Examinations under the Tuberculosis Scheme.

528 specimens were received during the year, of which 420 were specimens of sputa.

From Newhills Convalescent Home 105 sputa were received, of which 66 were positive sputa and 39 negative sputa.

General practitioners had 269 sputa examined, of which 51 were positive and 218 negative.

The County Medical Officers had 11 sputa examined with 3 positive results.

From hospitals in the County 35 sputa were received, of which 20 were positive and 15 negative.

The following table (Table IV.) shows the number and source of the sputa examined :—

TABLE IV.

	SPUTA.		Total.
	+	—	
Newhills	66	39	105
General Practitioners	51	218	269
County Medical Officers	3	8	11
County Hospitals	20	15	35
Totals	140	280	420

Pus.—13 specimens of pus were examined, 1 specimen being positive and 12 negative.

Urines.—25 samples of urine were examined for T.B., of which 2 were positive.

Fæces.—5 specimens of fæces gave negative results for T.B.

Pleural Effusions.—7 effusions were examined for T.B. all with negative results.

Autogenous Vaccines.—58 autogenous vaccines were prepared from specimens of sputa.

The following table (Table V.) shows the number and nature of the examinations under the Tuberculosis Scheme :—

TABLE V.

	+	—	Total.
Sputa	140	280	420
Urines	2	23	25
Fæces	—	5	5
Pus	1	12	13
Pleural Effusions	—	7	7
Autogenous Vaccines	—	—	58
Totals	143	327	528

Vaccines, Sera.

During 1930 the following vaccines and sera were issued to hospitals and practitioners :—

Diphtheria Anti-toxin.				Diphtheria [*] Anti-toxin—Concentrated.			
1,000	units	...	44	2,000	units	...	42
2,000	"	...	141	3,000	"	...	195
3,000	"	...	65	4,000	"	...	418
4,000	"	...	33	6,000	"	...	121
				8,000	"	...	67
Tetanus Anti-toxin				118			
Anti-Streptococcal Sera—							
Scarlet Fever				31			
Polyvalent				50			
Puerperal				8			
Erysipelas				12			
Anti-Pneumococcal Serum				2			
Vaccines—T.A.B.				34			

Aberdeen, 23rd March, 1931.

Examinations made for the Burgh of Peterhead during 1930.

During the year ending 31st December, 1930, the following examinations were made for the Burgh of Peterhead :—

Examinations for B. Diphtheriae.

		SWABS.		Throat.	Nose.	Total.
		+	—			
General Practitioners		56	89	51	5	145
Burgh Hospital		206	825	150	56	1,031
Totals		262	914	201	61	1,176

Examinations for Enteric Group.

	Widals.		Blood Cultures		Fæces.		Urines.		Total.
	+	—	+	—	+	—	+	—	
General Practitioners	4	20	—	2	—	8	—	1	35
Burgh Hospital	8	3	—	1	39	39	6	72	168
Totals	12	23	—	3	39	47	6	73	203

All positive results were for *B. paratyphosus* B.

Miscellaneous Examinations.

	+	—
Pus—Gonococci	4	5
Urines—B. Coli	2	6
Urines—Albumen	1	—
Blood Films—Anæmia	7	—

Examinations under Tuberculosis Scheme.

	Sputa		Urines.		Total.
	+	—	+	—	
General Practitioners	7	23	—	—	30
Burgh Hospital	19	8	—	3	30
Totals	26	31	—	3	60

The total number of examinations performed during the year was 1,464

Aberdeen, 23rd March, 1931.

Section IX.

VETERINARY SERVICES ... ..	55

REPORT BY COUNTY VETERINARY INSPECTOR ON THE OPERATION OF THE MILK AND DAIRIES (SCOTLAND) ACT, 1914.

No administrative difficulties have been encountered during the carrying out of the requirements of the above Act in 1930 and no points of special interest have arisen. The number of visits it has been possible to make is still much about the same as in previous years and it is very doubtful if the total can be increased to any extent until additional assistance is given.

An endeavour was made to visit as many unregistered dairies as possible during the year and it was found that although the quality of the cows was fairly good, the condition of the buildings in which they were housed was not at all satisfactory in some of the places visited. Grooming of the cows was in most cases non-existent and frequent visits of inspection would be the only way to improve conditions. The control of these non-registered dairies furnishes a problem in the administration of the Milk and Dairies Act, as they often constitute the sole milk supply to a small hamlet or group of two or three houses, and if one were to attempt to enforce anything approaching rigorous conditions, the owners would cease to supply milk to those in need of it, and as far as can be seen, more frequent inspection is the only means of ensuring to the purchasers of milk a reasonably wholesome supply. As has been pointed out in previous reports, it is far more likely that diseased cows will be found in these unregistered byres than in registered ones and the effects produced by the consumption of milk from such cows are more apt to be disastrous, as the milk is sold raw and not subjected to pasteurisation as is the case in most big dairies, and if disease be present, the infection is more concentrated, as the supply is in most cases drawn from a small number of cows.

It also seems to be desirable to inspect all dairy cows used in the larger farms where milk is supplied to married employees and their children. There exists a very great degree of ignorance of the cause of the spread of tuberculosis and most farmers fail, or profess to fail, to recognise a tuberculous udder even when it is grossly affected, their explanation for their failure to recognise such a condition being that the milk remains unchanged for a considerable time even although the quarter is enlarged, and for that reason they consider that the milk is fit to be used. That such ignorance is genuine in many cases is quite apparent as in one case where a cow was found to be suffering from advanced tuberculosis of the udder, a baby was being fed on the milk from the affected cow, and as a result contracted tuberculosis of the cervical glands, while the milk from two healthy cows in the same byre was being fed to calves. Such ignorance can only be dissipated by more widespread inspection and instruction in the hygienic production of milk.

It has been the inspectors' aim, to induce a farmer situated near any hamlet without a regular milk supply from a registered dairy, to start a milk round, and in several districts this has been done, and it is hoped that in time most villages of such a size as to pay a farmer for his trouble will have a supply of milk that will be produced and handled in a satisfactory manner.

General Condition and Cleanliness of Cows.

The condition and cleanliness of the cows has been very satisfactory in most cases although there still remain a few refractory individuals who seem to think grooming is unnecessary. An increasing number are now clipping the udder and flanks regularly and it is hoped that in time all may realise the benefit of this precaution. It is difficult to convince some farmers that clipping will enable them to have cleaner milk and they excuse themselves by stating that by so doing they render their cows more liable to contract mastitis, but if one convinces them that much time can be saved in grooming, and that there is no danger to the cow, one hopes that a clipping machine will be in use at an early date.

Methods of Feeding.

The methods of feeding the cows have remained the same; few farmers have adopted the scientific rationing of their cows. One new ingredient has, however, been added to the ration as a substitute for turnips as that crop was a failure in 1930. The new foodstuff is "beet pulp." Very large quantities have been used and as far as one can gather its use has been attended with very beneficial results, so much so that many farmers intend to grow less turnips and use a larger proportion of beet pulp in future.

Health of Cows.

The diseases encountered during the course of the inspections of dairy cows, apart from tuberculosis, were as follows:—

Mastitis	254
Atrophy	152
Eruptions (including cowpox)	99
Suspected tuberculous mastitis	43
Suppurating udders and teats	17
Retained placenta	22
Total	<hr/> 587 <hr/>

The cows affected were removed from the herds temporarily or permanently as the case required. In cases where the cows were suspected to be suffering from tuberculous mastitis the milk was destroyed until a diagnosis had been made.

A very severe outbreak of cowpox was experienced on a large dairy farm where almost 90 per cent. of the cows were affected. The milkers were also attacked and the infection was so acute that they were unable to work for some time. The disease originated with the introduction of one infected cow and the above experience only goes to show that dairy farmers should always isolate a cow showing any evidence of being affected with cowpox, as the disease is liable to become epidemic in character at any time.

An interesting case was also encountered in a cow suffering from cowpox. The scabs from the sores on the teats were found to be infected with virulent diphtheria bacteria. There had been an outbreak of diphtheria at the farm and the sores on the teats had been inoculated by an affected milker. The above case shows the necessity for the careful veterinary inspection of dairy cows when there is an outbreak of diphtheria on a dairy farm.

Tuberculosis in Dairy Cows.

During the year, 72 dairy cows on registered dairy farms which were found to be tuberculous within the meaning of the Tuberculosis Order, were dealt with in terms of that Order.

The forms of tuberculosis found were as follows:—

Tuberculosis of the udder	15
Tuberculosis with chronic cough	36
Tuberculous emaciation	21
Total	<u>72</u>

Milk Samples.

During the year, 43 samples of milk were taken from cows suspected to be suffering from tuberculous mastitis and examined microscopically and biologically.

Eight samples were found positive and the cows were immediately slaughtered. All eight cases were diagnosed by microscope and found positive on post-mortem examination.

Inspection of Cowsheds.

The sanitary condition of the registered dairy premises inspected has been satisfactory, although there is still room for improvement in the methods of some of the more backward dairymen.

Alteration to Cowsheds.

In the districts in which the Veterinary Inspector is responsible for the inspection and alteration of cowsheds, almost all the byres, &c., now comply with the bye-laws.

Certified Dairy Herds.

Owner and Premises.	Average Number of Herd.	Gallons produced per annum.
Major James Keith, Bonnyton and	Bonnyton, . 47 cows	47,000
Cairnbrogie	Cairnbrogie, 80 cows	70,000
Duthie Experimental Stock Farm	60 cows	70,000

Summary of Visits of Inspection in the Districts and Burghs.

DISTRICTS AND BURGHS.	Number of Visits.	Cows in Milk.	Cows (dry)	Total No. of Cows.	Tuberculosis Udder.	Mammitis.	Atrophy.	Eruptions.	Suppurating Conditions.	Retained Placenta.	T. B. Chronic Cough.	T. B. Emaciation.
Aberdeen District .	302	4,187	614	4,801	8	83	48	68	6	7	17	8
Deer "	123	1,286	290	1,576	2	21	15	18	4	3	3	6
Ellon "	116	2,196	353	2,549	1	57	38	6	1	3	8	3
Garioch "	66	1,205	207	1,412	1	40	16	4	2	1	3	—
Deeside "	44	496	85	581	1	11	7	—	1	1	4	2
Turriff "	38	566	79	645	—	10	13	—	—	2	—	1
Huntly "	22	452	66	518	1	17	8	2	2	2	1	1
Alford "	17	165	29	194	—	4	4	—	—	—	—	—
Fraserburgh Burgh	48	323	47	370	1	4	—	—	—	1	—	—
Peterhead "	8	96	16	112	—	2	2	1	—	—	—	—
Rosehearty "	28	87	11	98	—	1	—	—	1	1	—	—
Huntly "	10	48	9	57	—	2	1	—	—	—	—	—
Turriff "	15	66	14	80	—	—	—	—	—	—	—	—
Oldmeldrum "	3	37	4	41	—	—	—	—	—	—	—	—
Kintore "	3	35	8	43	—	2	—	—	—	1	—	—
Total .	843	11,245	1,832	13,077	15	254	152	99	17	22	36	21

Section X.

REPORTS BY SANITARY INSPECTORS ... ..	59

This section of the report contains the Reports of the Sanitary Inspectors. Separate reports for the Burghs are given, except in the cases of Oldmeldrum, Kintore, and Rosehearty. Reference to these three Burghs is made in the Reports of the Inspectors for Garioch and Deer Districts.

I.—DEER DISTRICT.

Drainage.—The drainage works are being well maintained and looked after. General drainage throughout the District and the Burgh of Rosehearty is in fairly good condition.

The Village of New Pitsligo has been formed into a Special Drainage District and Engineers are at work preparing plans as to what works will be required to put the drainage of the village into a good condition.

The drainage of the Villages of Fetterangus, St. Combs, Mintlaw, and New Deer requires attention.

Water Supplies.—The works within the Special Water Supply Districts are being well maintained. In the Burgh of Rosehearty a new water main has been laid along Union Street.

There has been great shortage of water in the Village of Boddam, but work is proceeding to improve the supply. Throughout the District generally numerous supplies have been introduced and others improved under the Rural Workers Act.

Scavenging.—The scavenging in the Special Districts and the Burgh of Rosehearty is being well looked after. The community ashpits in the Village of Boddam are to be done away with, a daily system of collection instituted, and five latrines built to render feasible the abolition of the present privy middens.

Nuisances.—A number of nuisances were dealt with and almost all remedied. The Rural Housing Act, 1926, has been a great assistance in improving houses. During the year 175 applications for grants were received and the work of reconstruction is going on. Many of the houses have been completed. The bad weather at the end of the year greatly hindered the work. Since the commencement of the Act, 376 applications have been dealt with.

Schools.—The schools, so far as visited, were found in a good condition and improvements in the sanitary conveniences of several of them have been carried out.

Slaughter-Houses.—All the slaughter-houses have been regularly visited. 426 visits were made, 504 animals were inspected and 3,668 lbs. of diseased meat were seized and destroyed, with the owners' consent.

Burial Grounds.—The burial grounds, so far as visited, were all found in good order with the exception of the one at St. Combs, which has now been closed by order of the Sheriff.

W. J. SIMPSON, *Sanitary Inspector.*

II.—ELLON DISTRICT.

(a) *General Account of the Sanitary State of the District, as regards Water Supplies, Drainage, Scavenging, Nuisances, &c., together with any suggestions for their improvement.*

1. *Water Supplies.*—PORT-ERROLL and COLLIESTON supplies gave entire satisfaction throughout the year.

HATTON.—The augmentation of this supply is now nearing completion. A distinct improvement will be felt when water is turned on from the new cistern, but I am of opinion that the present pipes throughout the village should be renewed. A section of this pipe cut out for the purpose of examination was very badly corroded.

NEWBURGH.—In previous reports I have dealt fully with the unsatisfactory state of this supply. It is now receiving attention.

TARVES.—A small improvement was carried out on this supply. The present reservoir is at too low a level to give satisfaction.

METHLICK.—I would suggest that a Special District should be formed for this village.

The overflow from the reservoir supplying the Council houses would be sufficient to meet the entire needs of the village.

PITMEDDEN, UDNY.—This village would also benefit by the formation of a Special District.

Outwith the Special Districts several supplies required attention.

Analysis of water taken during the year were found, with two exceptions, to be satisfactory. New sources are being considered in respect to Blindburn Crofts, Ellon, where the results of present supplies proved unsatisfactory.

2. *Drainage.*—PORT-ERROLL, TARVES, COLLIESTON, and NEWBURGH systems continue to give satisfaction.

METHLICK, PITMEDDEN, and HATTON are badly in need of formation into Special Districts.

With regard to sanitary conveniences, particulars are given in the following table :—

Name of Special District.	(1) W.C.'s.		(2) Without water and sink in house.	(3) (a) Dry closets.	(b) Privy middens.	(c) Ashpits.
	No. of w.c.'s.	No. of tenants. per w.c.				
Port-Erroll . . .	86	1	64	—	—	—
	10	2	—	—	—	—
	7	3	—	—	—	—
	6	4	—	—	—	—
Collieston . . .	25	1	34	—	—	2
Newburgh . . .	47	1	41	8	—	3
	5	3	—	—	—	—
Tarves,	27	1	16	14	2	31
	5	2	—	—	—	—

3. *Scavenging.*—The Scavenging Districts of Port-Erroll and Newburgh continue to give satisfaction.

COLLIESTON has now formed a District, and the unsightly, evil-smelling refuse depôts will be removed at an early date.

Public latrines are required for Port-Erroll, Newburgh, and Collieston.

4. *Nuisances.*—Eighty-two nuisances were reported or discovered and the necessary steps taken for their removal.

(b) *An Account of General Inspections and Special Inspections or Enquiries, including the supervision of Slaughter-Houses and Offensive Trades and sanitary condition of Schools and Workshops.*

1. *Special Inspections.*—Two hundred and ninety-two special inspections were made during the year.

2. *Infectious Diseases.*—All cases notified for removal to hospital received immediate attention.

3. *Slaughter-Houses.*—One additional slaughter-house was licensed during the year, making a total of seven in the District and one in the Burgh of Ellon. These were regularly visited and found in good order.

Colonel G. Leighton, Chief Food Inspector, Department of Health for Scotland, visited the slaughter-houses and expressed his entire satisfaction of the conditions which prevailed.

4. *Unsound Food.*—During the year, 352 inspections were made and all unsound meat detained for further inspection by a competent authority.

5. *Schools.*—Great credit is due to the Education Authority for the progressive manner in which improvements are being made. I cannot refrain, however, from again recommending the provision of drinking fountains in place of as expensive, but antiquated, drinking cups.

If these were provided now, it would save the wholesale abolition of the drinking cup wells such as occurred in the City of Aberdeen schools in 1912.

6. *Workshops.*—Seventy-six inspections were made and eight defects found. These were rectified in due course.

7. *Common Lodging-Houses.*—There are none in the District.

8. *Dairies.*—The dairies throughout the District maintained their high standard of cleanliness. As this section of the community has been more regulated by officials, laws, and orders than any other, one cannot but admire their efforts to meet the continuous additional obligations imposed.

9. *Housing.*—The Housing (Rural Workers) Act, 1926, is being taken advantage of. The majority of improvements has been carried out on the cottar type of house. Great satisfaction has been expressed by many of the occupants, particularly where water has been introduced into the house for the first time.

GENERAL.—As this is my last report for the Ellon District, I wish to acknowledge with grateful thanks the help and consideration I have always received in my work from the members of the Local Authority.

EDWARD W. BRANNEN, M.R.San.I., *Sanitary Inspector.*

III.—GARIOCH AND HUNTLY DISTRICTS AND THE BURGHS OF OLDMELDRUM AND KINTORE.

Area and Population.—The area is 330 square miles and the population is estimated at 20,500.

(a) *A General Account of the Sanitary State of the Area as regards Water Supply, Drainage, Scavenging, &c., with any suggestions for their improvement.*

1. *Water Supplies.*—The rainfall in 1930 was abundant and there was no shortage of water in either public or private supplies. The Special Water Supply Districts comprise the Villages of Insch and Rothney, Kemnay, Monymusk, Rhynie, Gartly Station, and Ruthven; and the Burghs of Oldmeldrum and Kintore.

INSCH AND ROTHNEY.—The capacity of the reservoir is 42,000 gallons and the average consumpt of water per day is 40,000 gallons. Messrs. Jenkins & Marr, C.E., Aberdeen, prepared plans for augmentation of the supply from a new source and for construction of a second reservoir at the same elevation as the existing one, but negotiations for obtaining the necessary wayleaves were not completed during the year.

KEMNAY.—Construction of a new distributing reservoir, with relative pipe lines, was completed in 1930. This District is now well supplied with water.

MONYMSK.—The supply of water was satisfactory.

RHYNIE.—Application was renewed to the Unemployment Grants Committee for assistance with the construction of a reservoir and a new pipe from the source, but assistance was not forthcoming. I anticipate that renewal of the piping will be necessary in the course of a few years.

GARTLY STATION.—The public works of water supply were constructed in 1923. They continue to give the utmost satisfaction.

RUTHVEN.—This is a hamlet of seven dwellings, a public hall, and a school, which was formed into a Special Water Supply District during the year. Public works of water supply have not yet been constructed, but estimates are being taken for the provision of a compound hydraulic ram to pump a supply of water from the spring known as "Drappin' Craig" to an elevated tank within the Special District, together with necessary lines of piping for supply and distribution.

BURGHs OF OLDMELDRUM AND KINTORE.—The water supplies for those Burghs met the demands made upon them.

OUTWITH SPECIAL DISTRICTS.—New or improved water supplies were provided at forty houses in the rural area. Seven samples of private water supplies were submitted to the County Analyst.

2. *Drainage*.—Excepting the Village of Ruthven, the Special Drainage Districts are co-extensive with the Special Water Supply Districts. The public drainages were maintained in good working order. The Special Districts of Rhynie were extended in 1930 to include new houses built by the Local Authority, the Nicoll Memorial Hospital and a proposed playing field for school children. The question of forming the Village of Meikle Wartle into a Special Drainage District was again considered by the Local Authority, but, owing to the scattered nature of the proposed District and its low rateable value, it was reckoned that the cost of constructing proper drainage works was prohibitive. Waste waters and sewage from thirty dwelling-houses were discharged into a ditch which, for the greater part of its length, ran parallel with the public roadway and was polluted to the extent that offensive odours were detectable. Cattle in adjoining fields drank the water and trampled in the banks of the ditch, so that its free flow was obstructed. It was ultimately decided to lay down 230 lineal yards of 9-inch diameter fireclay pipes and 20 yards of 6-inch diameter fireclay pipes at improved gradients, with two manholes, three road gullies, and other connections, which had the effect of remedying the worst part of the nuisance. Private drainage systems were constructed at forty-eight houses throughout the Districts and Burghs.

3. *Scavenging*.—The abolition of fixed ashpits in favour of the bin system of dealing with house refuse continues to make progress. The Village of Rhynie was formed into a Special Scavenging District during the year. Modern methods of cleansing have been instituted in the more populous parts of the area as follows, viz.:—Port-Elphinstone (subsequently added to the Burgh of Inverurie), 1921; Inch and Rothney, 1925; Burgh of Kintore, 1928; and Rhynie, 1931.

I suggest that the Village of Kemnay should be formed into a Special Scavenging District and that the Burgh of Oldmeldrum should adopt the ashbin system of collecting house refuse.

The method of scavenging a town or village gives a true indication of the type of the sanitary conveniences prevailing therein.

The following table shows the present position in the more populous parts of the area :—

Special Districts and Burghs.	Insch and Rothuey.	Kemnay.	Mony-musk.	Rhynie.	Gartly.	Old-meldrum.	Kintore.
Estimated population	1030	920	120	375	48	1010	735
Approximate number of houses	306	270	32	116	12	300	290
Houses with separate water-closets	115	64	3	33	7	130	64
(1) Water-closets used in common by 2 tenants	34	22	—	5	2	14	23
" " 3 "	16	5	—	4	—	9	5
" " 4 "	6	7	—	3	—	1	9
" " 5 "	5	1	—	1	—	—	—
(2) Houses without water and sink inside	104	152	27	61	3	130	70
(a) Dry closets used in common by 2 tenants	—	4	—	5	—	8	—
" " 3 "	—	1	—	3	—	1	—
" " 4 "	—	—	—	1	—	—	—
" " 5 "	—	—	—	—	—	—	—
(b) Privy middens used in common by 2 tenants	—	4	—	2	—	12	1
" " 3 "	—	6	—	—	—	3	2
" " 4 "	—	3	—	2	—	1	—
" " 5 "	—	2	—	1	—	—	—
(c) Ashpits used in common by 2 tenants	—	10	—	9	1	26	—
" " 3 "	—	6	—	5	—	10	—
" " 4 "	—	9	—	4	—	2	—
" " 5 "	—	5	—	2	—	2	—

4. *Public Conveniences.*—The increased popularity of the motor bus for travelling long distances makes a growing demand for public conveniences for both men and women at some of the more important stopping places. The provision of suitable accommodation is necessary at Insch. The Town Council of the Burgh of Oldmeldrum purchased a site for the erection of a building of this description.

5. *Housing.*—None of these Local Authorities built new houses during the year. Under the schemes of assistance to private enterprise, six new houses were erected in the County area and one in the Burgh of Kintore. Under the Housing (Rural Workers) Act, 1926, which was not adopted by the Burghs of Oldmeldrum and Kintore, twenty-two applications were approved for assistance with the re-conditioning of twenty-nine buildings, of which twenty-four were existing dwellings and five were buildings other than dwelling-houses.

Generally, a high standard of habitability was provided in the improvements carried out under the Act. There were twenty-one houses of 3 apartments, three houses of 4 apartments, and five houses of 5 apartments. Twenty-eight of the houses were provided with a water supply and sink inside, twenty-six (including all the smaller houses) with sculleries and food stores, and seventeen with flush water-closets.

Detailed particulars of 368 houses were recorded in terms of the Housing (Inspection of District) Regulations (Scotland), 1928, and reports were made in respect of 110 houses at which defects of any description or the need for improvements were found.

(b) *An Account of General Inspections and of any Special Inspections or Enquiries, including the supervision of Slaughter-Houses and other Offensive Trades and the sanitary condition of Factories and Workshops*

1. *Inspections.*—General inspections continued to be made for the discovery of conditions injurious or dangerous to health. Special inspections were made where sanitary improvements were being carried out, where complaints were received, where there were cases of infectious disease, and to all subsidised houses in course of erection or improvement.

2. *Infectious Diseases*.—The total number of cases notified was 155, of which 58 were in Garioch District, 60 in Huntly District, 3 in Oldmeldrum, and 4 in Kintore. The nature and number of the cases notified were :—Scarlet fever, 61; chicken-pox, 29; diphtheria, 21; pneumonia, 18; dysentery, 9; tuberculosis, 7; erysipelas, 6; puerperal, 3; and ophthalmia neonatorum, 1. There were 90 cases removed to hospitals.

3. *Slaughter-Houses and Offensive Trades*.—There was duly carried out an improvement suggested by me to renew, with a close fence of corrugated iron, the enclosure in front of Kemnay slaughter-house, so that operations within the premises could not be viewed from the adjoining roadway. Routine visits of inspection, numbering 124, were made to the slaughter-houses situated at Daviot, Kemnay, Kintore, Rothney, and Rhynie. The business conducted at the two places last named was comparatively small in extent, as the greater part of the meat consumed in those localities was obtained from public slaughter-houses or from dead meat markets. The Ministry of Agriculture graded the meat passed through the slaughter-houses at Kemnay and Kintore for sale in the London markets. Six slaughtermen held licences in terms of the Slaughter of Animals (Scotland) Act, 1928, and their operations were favourably reported on to the Local Authority.

During the year an application was made to establish a knackery at South Cottown, Kintore, and this was sanctioned.

4. *Factories and Workshops*.—The register was revised, showing the total number of factories and workshops to be 210, viz. :—Garioch District, 105; Huntly District, 63; Oldmeldrum, 28; and Kintore, 14. The number of inspections was 170. Of 13 defects to which attention was directed, 11 were remedied by the end of the year.

(c) *An Account of the Condition of Common Lodging-Houses.*

There are no common lodging-houses within the area.

(d) *An Account of the Condition of Burial Grounds.*

A Report by the Burial Grounds Committee of Garioch District Council contained, among others, the following recommendations :—

- (1) That it would be an improvement in most of the burial grounds if a number of the railings and kerbs around grave spaces were removed, particularly in cases where the relations of the persons buried do not pay for the upkeep of the grave spaces.
- (2) That extensions should be proceeded with as soon as possible at the burial grounds in the following Parishes, viz. :—Daviot, Kemnay, Rayne, Culsalmond, and Inch.
- (3) That rules and regulations should be drawn up for each of the burial grounds within the District.

GEORGE WATT, *Sanitary Inspector*.

IV.—DEESIDE DISTRICT.

1. *Water Supply*.—The Special Water Supply Districts are Aboyne, Braemar, Kincardine O'Neil, Lumphanan, Torphins, and Tarland.

ABOYNE.—On the Aberdeen-Braemar road the laying of the new 5-inch main from the fountain to the bridge over the Tarland burn was carried out in the beginning of the year and certainly improved the supply to the houses in the east end of the village. During the summer months, however, complaints were received from occupiers of some of the larger houses in the west end as to scarcity of water at certain periods throughout the day. As nothing could be done till the summer season was past, the Council remitted the matter to their Engineers,

Messrs. Tawse & Allan, Aberdeen, to examine and to report on the conditions complained of. The Engineers recommended that a new 7-inch bitumen-lined distributing main be laid from the fountain to the reservoir, also several branch mains of 5 and 4 inches respectively. This work is meantime being carried out under the supervision of the Council's Engineers.

BRAEMAR.—The supply was well maintained and no trouble occurred during the year.

TORPHINS.—Scarcity of water occurred frequently during the summer months, owing to corrosion of the delivery pipes from the reservoirs. The Council are meantime negotiating with the Superior of the village as to wayleave, &c., for the proposed laying of new pipes from the village to both reservoirs.

KINCARDINE O'NEIL.—As the supply is limited great care had to be taken to conserve the water and prevent wastage. No actual scarcity occurred during the year, but the Council are meantime searching for a fresh source of supply.

LUMPHANAN.—The supply was well maintained, but, since the new cottages have been built, scarcity of water has occasionally been felt at some of the higher levels. The Council, however, have arranged to lay a new main from the reservoir to the lower part of the village, thus leaving the old main to supply the high level houses.

TARLAND.—Tarland has now an excellent water supply. When the water was first turned on, and for some considerable time, trouble was caused by leakage owing to many of the house service pipes being unable to withstand the increased pressure. All the pipes have now been renewed or repaired and everything is very satisfactory. Outside the Special Districts many improvements have been carried out. Twelve new supplies by gravitation were laid down and five had new pumps provided.

2. *Drainage.*—The Special District sewers have all worked satisfactorily except for a short length at Aboyne which got choked and had to be cleared. Outwith the Special Districts improvements continue to be carried out. Five houses were provided with bath, w.c., and sink; two with w.c. and sink; five with w.c.'s; and eleven with sinks only. All new work was smoke-tested before being covered up.

5. *Scavenging.*—Scavenging of the Special Districts has been carried out as formerly and given entire satisfaction. Cleansing of ashpits throughout the District has been fairly well attended to.

4. *Nuisances.*—All nuisances reported or coming under my notice were attended to and intimation sent to the authors of same.

5. *Inspections.*—General inspections were carried out as formerly, and special inspections were made in all cases of infectious diseases notified, and where house building, water supplies, or drainage works were being carried out.

6. *Schools.*—All the schools were visited and found clean and well kept. Distempering of the walls was carried out at several during the summer holidays. A new system of heating has been fitted up in Aboyne H.G. School and is proving quite satisfactory.

7. *Workshops.*—All the bakehouses and most of the workshops were visited and were generally found clean and in good condition. The workshops number 132, and 120 visits of inspection were made. Two complaints were found and dealt with.

8. *Dairies.*—The number on the register remains the same as at the beginning of the year, namely, twenty-nine. One hundred and sixty-eight visits of inspection were made. Two complaints were found and dealt with.

9. *Slaughter-Houses*.—The slaughter-houses were regularly visited and always found clean and in good condition. One hundred and seventy-three visits were made and two complaints were found, which were dealt with.

10. *Common Lodging-Houses*.—There are none in the District.

11. *Burials*.—Undertaken in terms of Section 69—None.

12. *Burial Grounds*.—The burial grounds have all been kept in fair order and no complaints found or received in regard to any of them.

13. *Housing, &c., Acts*.—During the year four houses were erected privately without assistance, also two men-servants' sleeping places. Three were erected privately with assistance and sixteen by the District Council—six at Aboyne, six at Torphins, and four at Lumphanan. Twelve houses were reconstructed or repaired under the (Rural Workers) Act. Fifteen had repairs carried out under Section 16 of the Public Health (Scotland) Act, 1897.

ALEX. MORRICE, *Sanitary Inspector*.

V.—TURRIFF DISTRICT.

Water.—The water supply for Cuminestown Village is still on the short side, and during the summer the old source had to be joined up again in order to keep up a supply.

An endeavour has been made to get a supply to come to the village by gravitation but this has been found to be impracticable. Plans were submitted for taking water from the source at Stanrybrae. Here, the water was to be pumped up by two rams to a cistern situated in the high ground above the village. This cistern was to be connected direct to the present main pipe supplying the village. Although there is at all times more than sufficient water at the source to serve a place twice the size of Cuminestown, there is not sufficient to keep two rams going and serve the village. The only other way to raise the water would be by an oil engine and pump.

NEW BYTH.—This village is well supplied with good water sufficient for all domestic purposes. It is more than fifty years ago since the water was taken into this village. Time and the nature of the subsoil through which the pipes are taken are tending to make the pipes very liable to fracture. This was proved during the autumn when the main burst near to where it enters the village. Owing to the poor and decaying state of the village little can be done to improve matters.

GARMOND.—There have been no complaints this year. £8 was spent on repairs on the water wheel and pump, and things are working smoothly.

FYVIE VILLAGE enjoys a supply of good water and the high pressure permits of modern conveniences being used.

ROTHLENORMAN has been formed into a Special Water and Drainage District. This place has suffered from the want of a good water supply and drainage. It may be some time before the work is started, but I hope, for the good of residents, that the water will be turned on in the early autumn.

Outside the villages six new water supplies have been got and twenty-seven improved and taken into the houses.

Drainage—*NEW BYTH*.—At present the drainage in this village is in good order and no repairs have been required during the year.

CUMINESTOWN.—The village has now been drained and the next step will be to get each property connected with the sewer. Up to the present, forty connections have been made; w.c.'s are out of the question until the water supply has been augmented.

Outside the villages twenty-seven houses have been properly drained.

Infectious Diseases.—The following cases were notified during the year :—Scarlet fever, 25; diphtheria, 16; erysipelas, 4; puerperal fever, 3; pneumonia, 7; dysentery, 1; ophthalmia, 1; total, 57. Removed to hospital, 49. Premises disinfected, 49; bedding, &c., disinfected, 84.

Slaughter-Houses.—Lewes of Fyvie is the only slaughter-house now in the District. Weekly visits are paid to it and the place has always been found clean. The number of animals killed during the year is below the average for some years—cattle, 75; sheep, 119; pigs, 16.

Food Inspections.—Inspections were made of bakeries and butchers' shops; also all small shops where foodstuffs are exposed for sale. Vans come under this heading.

Knackery.—The newly-established knackery at Markethill Croft, Turriff, which was licensed in October, fills a long-felt want in the District. Dead animals will not now be left for days before being collected. This place is visited once a week and has always been found well kept and free from offensive smells. There is a sufficient supply of water and it is made good use of.

Burials.—No interments were made under Section 69.

Schools.—The schools were visited just before the re-opening in August. There are 11 schools which could be improved if the present outside accommodation was renovated and water-closets provided for the use of the scholars. Most of these schools have a supply of water sufficient for this purpose.

Workshops.—At least two visits each have been paid to the workshops and bakeries. No complaints were received and all were in a fair state of cleanliness.

Housing.—One house was built under the 1924 Act and 37 were renovated under the Rural Workers Act, 1926. At present there are 15 houses almost finished.

Name of Village.	W.C.'s.	Tenants per W.C.	Without Water in Sinks.	Dry Closets.	Ashpits.
Cuminestown, .	30	1	63	69	24
New Byth, . .	10	1	54	64	63
Garmond, . .	...	...	19	30	27
Fyvie, . . .	32	1	..	3	20

Burial Grounds.—The seven burial grounds have been visited and found in good order. Two very old places could be improved in look if the grass were cut more often and the old stones given some attention.

Tents and Vans.—Ten visits were made to these. Three were objected to but the parties cleared out before action could be taken.

A. B. FINDLAY, *Sanitary Inspector.*

1931.

HOUSING (INSPECTION) REGULATIONS.

A. Number of houses inspected,	56
Number of cases brought before Local Authority, .	2
Number of houses considered dangerous to health, .	9
Number of houses the defects of which were remedied, .	37
Number of houses being dealt with,	17

VI.—ABERDEEN DISTRICT.

Nuisances.—The number of nuisances dealt with during the year shows a considerable increase compared with previous years. The work was of the usual routine order and does not call for any special comment. Several cases of overcrowding were found, but, owing to the shortage of houses, it was impossible to suggest drastic measures being taken in any of the cases.

Drainage.—The sewers within the six Special Districts gave very little trouble during the year. New drainage systems were laid down in connection with 40 new houses, and the drainage of 82 old houses was either renewed or overhauled.

In connection with the above, I made 74 smoke tests during the year.

At the request of the Department of Health I again submit the statement, which is brought up to date, showing within the boundaries of the Special Districts the number of water-closets, dry closets, privy middens, and ashpits common to two or more tenants, and also the number of houses without water supply and sink inside the house. I have also included the number of houses with separate w.c. and water and sink inside the house :—

	Special Districts.					
	Water- ton.	Cults.	Culter.	Dyce.	Manno- field.	New- machar.
Number of houses,	1155	553	474	221	137	71
Houses with separate water-closet,	353	484	232	94	66	24
Houses with water supply and sink,	759	545	447	168	131	41
Houses with separate dry closet,	7	1	7	6	2	5
(1) Water-closets used in common by—						
2 tenants,	92	14	35	17	4	7
3 tenants,	65	5	35	15	15	3
4 tenants,	74	5	15	12	2	1
5 or more tenants,	15	—	1	—	3	—
(2) Dry closets used in common by—						
2 tenants,	2	1	—	1	—	1
3 tenants,	2	—	—	—	—	2
4 tenants,	3	—	—	—	—	1
5 or more tenants,	—	—	—	—	—	—
(3) Privy middens serving—						
2 tenants,	—	—	—	—	—	1
3 tenants,	—	—	—	—	—	2
4 tenants,	—	—	—	—	—	1
5 or more tenants,	—	—	—	—	—	—
(4) Ashpits serving—						
2 tenants,	—	—	—	—	—	4
3 tenants,	—	—	—	—	—	5
4 tenants,	—	—	—	—	—	2
5 or more tenants,	—	—	—	—	—	—
(5) Houses without water supply and sink,	376	9	27	53	6	30

Housing.—Again another year has passed and no houses were built by private enterprise for the purpose of letting. Fifteen houses were erected and 3 were in course of erection at the end of the year—none of which are under any State Assistance Scheme. This shows a reduction of 4 in each case as compared with the previous year.

Under the scheme for assisting private enterprise 7 houses were erected, and 11 were in course of erection at the end of the year.

Under the County Council's Housing Scheme 4 houses were erected and occupied during the year, and 28 were in course of erection. Sixteen of the latter are in the Culter Special District and 12 at Rocks of Balmedie Quarry.

The Local Authority have now built 239 houses in the District, but there is still great need for a good many more, and more especially in the Waterton Special District. In this particular area 3 houses were closed, and Closing Orders have been passed upon 2 others, but these cannot be put into operation as no alternative accommodation can be got. There are many more houses in the same area which are completely done and are not suitable for reconstruction, but, until such time as other accommodation is provided, no action can be taken.

Fifty new houses are urgently required for this area, but the rents will have to be lower than hitherto. The bulk of the householders are millworkers, and their average earnings do not permit them living in a higher rented house than from £10 to £14 per annum.

Wooden houses do not seem to find favour with many people, but 18 of this type, plastered inside, which were erected by the Committee at Bankhead some years ago, are spoken very highly of by the tenants. Only one vacancy has occurred since these were built, and amongst the dozens of applicants were many who were already well housed. These houses are let at £18 for four rooms, bathroom, and scullery, and £15 for three rooms, bathroom, and scullery. With the fall in building prices I am of opinion that the same type of house could be provided to-day and let at £15 and £12 respectively.

Housing (Rural Workers) Act.—Under the above Act 61 applications were received and approved of during the year. The number of houses included in the applications was 92. Four of these houses were derelict and 3 were buildings not previously occupied as dwelling-houses. The transformation of some of these houses requires to be seen to be believed. One of the many is a three-roomed cottage with bathroom and scullery complete. This house had originally been the cottar house, but had been allowed to drift into such a state of disrepair as to render it unfit for human habitation, and for many years previous to its reconstruction had been the poultry house at the farm. In order to get over the difficulty of finding temporary accommodation for families whose houses are being reconstructed, the Committee have erected two huts—one of two and the other of three apartments—at Bankhead, and these are being taken full advantage of. Both huts are made in sections, so that, should it be necessary, they can be dismantled and erected again where desired. A roadman's van has also been used for the temporary housing of one family, and proved to be very satisfactory.

Water Supply.—The joint supply for Waterton and Dyce Special Districts is badly in need of augmentation, and a scheme is at present in course of preparation for this purpose. During the year I had 20 samples analysed by the County Analyst, the result being—5 reported as good, 4 fair, and 11 bad. The supplies which were reported as bad have been duly attended to.

Dairies.—At the end of the year there were 293 parties registered for the sale of milk, and 383 visits of inspection were made. There are still a few outstanding cases which are not up to the standard of the new dairy bye-laws, but most of these are upon the last year of the lease. Should the lease be renewed, steps will immediately be taken to have the improvements carried out.

It is gratifying to note that cleanliness is being more attended to year by year. The value of fitting up drinking bowls in the dairy byre is gradually being realised. Several byres in this District had these fitted up during the year, and all are agreed that it is money well spent.

Factories and Workshops.—One hundred and fourteen inspections were made and three notices were served for defects found. These were duly attended to.

WM. PARK, *Sanitary Inspector.*

VII.—ALFORD DISTRICT.

Water Supply.—There is no change in the Special Water Districts. The systems are all in good order and no scarcity of water was experienced in any of them. Progress continues to be made throughout the District in improving the water supplies at cottar and other houses. Twelve new water supplies were introduced in the course of the year.

Drainage.—There are as yet no Special Drainage Districts. The formation of the Village of Alford into a Special Drainage District was considered by the District Council soon after it came into being, and a recommendation was sent to the County Council that the Village of Alford be formed into a Special Drainage District. With the recent increase in the number of houses, the need for this has become more urgent, as the present system is very unsatisfactory. I have hopes that the coming year will see this long-delayed improvement carried out.

A number of private drainage systems were renewed or improved, mostly in connection with the provision of water-closets and improved sanitary fittings in dwelling-houses.

Nuisances.—These were of the usual order, mostly choked drains, filthy privies and water-closets. Several complaints were, on investigation, found to be without foundation, and, in several instances, were cases of spite amongst neighbours. All nuisances reported or coming under my notice were immediately dealt with, either verbally or by written intimation, and no case had to be reported for further action.

Scavenging.—Alford Village has now been formed into a Special Scavenging Area. Bye-laws have been framed, and when these are approved the scheme will come into operation. There is no doubt that the sanitary condition and the amenities of the village will be greatly improved, as the burns which run through the village are the dumping place of broken crockery and rubbish of every description. A suitable piece of ground has been bought for a refuse dépôt.

The formation of the Village of Lumisden into a Special Scavenging Area would improve the sanitary condition of the place.

Special Inspections.—These were made in connection with all cases of infectious disease, when improvements were being carried out on dwelling-houses, water supplies, drainage, &c.; also when complaints were received.

Housing.—Under the Housing (Scotland) Acts considerable progress was made. Four three-roomed houses were erected by the Local Authority in the Village of Alford. Three houses were built by unassisted private enterprise and one with aid of subsidy. Five houses were reconstructed under the Housing (Rural Workers) Act, 1926.

One hundred and nine houses were inspected and 12 defects remedied.

Slaughter-Houses.—The number of slaughter-houses is the same as last year. They were inspected regularly and always found in a satisfactory condition.

Schools.—The inspection of school premises was carried out as in former years, and in most cases there was no cause for complaint. There are yet a few schools where the lavatory accommodation is not very satisfactory.

The Education Committee have approved of the introduction of water-closets at Tough Public School, and it is expected that the work will be proceeded with on an early date.

Dairies.—These come under the County Veterinary Inspector.

Burial Grounds.—The burial grounds are all kept in good order.

JAS. ALLANACH, *Sanitary Inspector.*

**Statement by Sanitary Inspector of Proceedings under the Public Health
and other Acts during 1930.**

	No.
Subordinate Sanitary Inspectors employed,	0

I.—NUISANCES.

Complaints received,	4
Intimations served under Section 19,	15
Notices served under Section 20,	0
Cases in which legal proceedings were taken,	0
Cases in which legal proceedings were successful,	0

II.—WORKSHOPS.

Inspections,	86
Notices served under Section 2 (3), Factory and Workshop Act, 1901,	0
Cases in which legal proceedings were taken,	0
Cases in which legal proceedings were successful,	0

III.—TENTS AND VANS.

Inspections,	0
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IV.—UNDERGROUND DWELLINGS.

Reported to Local Authority,	0
Notices to Owners (Section 74),	0
Cases in which legal proceedings were taken,	0
Cases in which legal proceedings were successful,	0

V.—COMMON LODGING-HOUSES.

On Register at 31st December, 1930,	0
Common Lodging-Houses belonging to the Local Authority,	0
Inspections between 8 a.m. and 10 p.m.,	0
Inspections between 10 p.m. and 8 a.m.,	0
Intimations of irregularities sent to keepers,	0
Cases of infectious disease reported to Medical Officer (Section 97),	0
Unregistered premises dealt with,	0
Cases in which legal proceedings were taken (breach of bye-laws, &c.),	0
Cases in which legal proceedings were successful,	0

VI.—HOUSES LET IN LODGING.

On Register, 31st December, 1930,	0
Inspections,	0
Cases in which legal proceedings were taken,	0
Cases in which legal proceedings were successful,	0

VII.—INFECTIOUS DISEASES.

Visits of inquiry, &c.,	42
Patients removed to hospital,	37
Patients removed to house of reception,	0
Notices served under Section 50 (2),	0
Notices served under Section 53 (2),	0
Intimations to Education Authorities, Teachers, &c.,	21
Houses or premises disinfected,	26
Sets of clothing, bedding, &c., disinfected or destroyed,	29
Cases in which legal proceedings were taken,	0
Cases in which legal proceedings were successful,	0

VIII.—BURIALS.

Burials undertaken in terms of Section 69,	0
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IX.—SLAUGHTER-HOUSES AND OFFENSIVE TRADES.

Applications under Section 32 for sanction to establish,	0
Applications granted,	0
Applications under Section 33 for licence or renewal of licence,	3
Applications granted,	3
Public slaughter-houses (if any) belonging to Local Authority,	0
Private slaughter-houses,	3
Unlicensed slaughter-houses dealt with	0
Inspections of slaughter-houses,	93
Inspections of other offensive businesses,	0
Number of such other offensive businesses at 31st December, 1930,	0
Cases in which legal proceedings were taken (breaches of bye-laws, &c.),	0
Cases in which legal proceedings were successful,	0

X.—UN SOUND FOOD.

Inspections under Section 43—(a) Meat,	52
(b) Other foods,	14
Seizures of unsound food—(a) Meat,	2
(b) Other foods,	0
Animals or carcases or articles of food destroyed with owner's consent by or at the instance of the Sanitary Inspector,	2
Cases in which owners of unsound food were prosecuted,	0
Convictions in connection with above cases,	0

XI.—SALE OF FOOD AND DRUGS ACTS.

Samples procured for analysis,	0
Certified to be genuine,	0
Certified to be adulterated,	0
Cases in which legal proceedings were taken,	0
Cases in which legal proceedings were successful,	0

XII.—BYE-LAWS.

Inspections in carrying out Bye-laws relating to—	
(a) Pig-styes,	0
(b) Public conveyances,	0
(c) Buildings,	0
(d) Cleansing in Special Scavenging Districts,	0
(e) Other sanitary matters,	0

(Signed) JAMES ALLANACH,
Sanitary Inspector.

17th April, 1931.

BURGH OF ELLON.

Water Supply.—There was a good supply nearly the whole year, with the exception of a short time in the middle of summer, when it was showing signs of being very short, but the rain came on just at that time and saved us; and there was a shortage during the end of the year in the higher part of the burgh. There was plenty of water in the reservoir, but the water main was not able to carry as much as was being used or wasted, but I found a few leaks, and when they were put in order it came all right again. It seems to me that we are running very near with our water supply. When it is a dry summer, we are short of water within the reservoir; then, again, sometimes we are short of water within the burgh when there is plenty in the reservoir, and there are still more baths being fitted in and more water-closets and garages, which always mean a bigger demand.

Drainage.—Drains and sewers have all been working well during the whole year. Station Road, Ythan Terrace, and The Square sewers require to be cleaned every now and then to keep them in proper order. There was very little flooding during the heavy rains.

Nuisances.—All nuisances which have come under my notice have been dealt with. Intimations of these nuisances were sent to the author as soon as inspections were made. All were removed or are being removed. The daily collection of refuse is carried out by two carts going round every morning. This scheme is working very well, and there is a fortnightly collection of papers, which are taken to the dump and burned.

General Inspections.—General inspections were carried out as formerly. Special inspections were made in all cases in regard to complaints and also in connection with houses where sanitary improvements were being carried out.

Sanitary Condition of Schools.—The cleansing of the school within the burgh has been well attended to.

Factories and Workshops.—There are 37 factories and workshops in the burgh. Inspections were carried out as formerly, and they were found to be kept in a satisfactory condition.

House Let in Lodgings.—There is only one house let in lodgings within the burgh. This, on inspection, showed that the bye-laws were being well attended to.

Dairies.—Inspections of the premises have been carried out as formerly. There is only one registered dairy within the burgh, where there are three cows kept. Both premises and cows are kept in a clean condition. There is also a milkshop within the burgh, which is kept in a clean condition and has a good supply of cold water, but has no proper means of heating water for washing and scalding utensils and appliances used in connection with the dairy.

Housing.—There is still a shortage of houses within the burgh. When there is a house to let inside the burgh, there are eight to ten applicants for it. There are also a few of the older houses badly in need of repair. Some of them would need to be vacated before they could be put in proper order. There is also a great want of water and sinks in many houses and a shortage of water-closet accommodation.

3 houses of 6 tenants, 1 w.c.

5 houses of 5 tenants, 1 w.c.

12 houses of 4 tenants, 1 w.c.

14 houses of 3 tenants, 1 w.c.

22 houses of 2 tenants, 1 w.c.

Sixty-nine houses without water.

Ashpits—*Nil*.

Privies, 2.

W.C. converted—*Nil*.

GEORGE DUNCAN.

BURGH OF FRASERBURGH.

1. *Water Supply.*—No scarcity of water was experienced during last year, and the reservoirs are meantime overflowing. At Fedderate Reservoir it was found that the banks were being worn away and undermined considerably by wave action, and the Town Council have decided that it will be necessary to form some sort of protection, such as stone pitching. This work may be spread over a number of years, and will be done in sections during the summer months, when the water is at a low level.

2. *Sewerage*.—The sewerage system of the burgh is quite satisfactory, and the sewers discharge into the sea. There were two cases of flooding reported during the year. In one case, the main sewer was found to be incapable of carrying off storm water, resulting in a low-lying property always being flooded during heavy rainfall. A short stretch of duplicate sewer was laid, and no further flooding has been experienced. In the other case, water was found to have accumulated to a depth of about 12 inches under the floors of two adjoining dwelling-houses. The water was pumped out on several occasions, but ultimately a spring was located at the rear of the dwelling-houses. It is intended to tap this spring and carry it into a storm overflow about 25 yards distant.

A new outfall sewer from the Housing Area was laid during the year.

3. *Scavenging*.—The scavenging and refuse collection is carried out daily, and the system is quite satisfactory. The refuse dump is outwith the burgh boundary, and the dumping is carried out according to the Department of Health Regulations and to the satisfaction of the Chief Inspector of Cleansing. The dump is badly infested with rats, and it is necessary to reduce their number periodically by means of gassing with calcium cyanide and the laying of barium carbonate baits. One man is employed as caretaker at the dump.

4. *Nuisances*.—147 complaints were received, and 76 intimations were served under Section 19 to the proprietors concerned, the others being attended to by members of the cleansing staff. Nuisances were generally found to consist of choked or defective drains, accumulations of refuse, &c. No legal proceedings were taken.

The particulars required by the Board of Health's Circular of 1st September, 1925, are as follows:—

Number of houses inspected.	686
.. one and two-roomed houses.	377
.. common w.c.'s serving 2 tenants.	107
.. .. 3 ..	53
.. .. 4 ..	33
.. .. 5 ..	12
.. .. 6 ..	6
.. dry closets .. 2 ..	2
.. houses without water supply inside.	196

Infectious Diseases.—137 patients were removed to the Infectious Diseases Hospital. 146 visits of inquiry were made. 152 houses were disinfected with formaldehyde spray, and 141 sets of bedding by steam disinfectors. Three hundred and seventeen intimations and clearance certificates were issued to schools.

5. *Food Inspection, &c.*—There is only one food factory within the burgh, where the curing and tinning of herrings is carried out during the fishing season. These premises have always been kept in a first-class condition, and are meantime undergoing extensive alterations with a view to improving the working conditions and the manufacturing processes. All places where food is prepared or exposed for sale are inspected regularly, and all have been found in good condition.

Fifty-five seizures of unsound meat were made during the year, all at the public slaughter-house, and all with owner's consent, the total weights seized amounting to 6,951 lbs. meat and offal, and 454 lbs. mutton. In the majority of cases, the meat was tuberculous.

Sixty-three seizures of preserved foods were made, all with owner's consent. These consisted of tinned meats, fish, milk, and fruit, and the total weight condemned was 289 lbs. 2 ozs.

There is only one slaughter-house within the burgh, belonging to the Town Council and in charge of a caretaker employed by the Council. Inspections are made regularly and the caretaker acts as Detention Officer, all cases of unsound meat being reported to me.

General inspections were systematically made and all nuisances found to exist were removed. No proceedings were taken under the Burgh Police Act in connection with sanitary matters.

The schools in the burgh are all in first-class sanitary condition.

The factories and workshops were inspected regularly, especially during the fishing season, and were all found to be in good sanitary condition.

6. Slum Clearance Scheme.—A special survey of the town was made in this connection and a copy of the report has been sent to the Department. Altogether, 149 houses were inspected. Of these, 89 were condemned as being unfit for human habitation, and it was considered that the other 60 could be made reasonably fit for human habitation if repairs and improvements were carried out. These will be attended to during 1931.

Offensive Trades.—There is only one registered business within the burgh, that of tallow melting, which is carried out satisfactorily.

Tents and Vans.—86 inspections were made at the Fair Ground during the summer season, and, on the whole, the tents and vans were found to be kept in a cleanly condition.

Common Lodging-Houses.—There are no common lodging-houses within the burgh.

Burial Ground.—The burial ground is outwith the burgh boundary.

Food and Drugs Act.—The County Police carry out the work under the Food and Drugs Act.

Dairies, Cowsheds, and Milkshops.—These now come under the control of the County Veterinary Inspector, but visits of inspection are made in the ordinary course of work, and all these have now been brought up to a good standard.

D. MASSIE, *Interim Sanitary Inspector.*

BURGH OF HUNTLY.

(a) *A General Account of the Sanitary Condition of the Burgh as regards Water Supply, Drainage, Scavenging, and Matters affecting Public Health, with suggestions for the improvement of these services.*

1. Water Supply.—The water supply of the burgh continues to be of good quality, and has been well maintained during the year. The supply from the springs was sufficient to meet the needs of the burgh for about nine months of the year, but for approximately three months during the summer water from the enclosed catchment area had to be used. The amount of water collected from the springs exceeds the demand for at least nine months of the year, when the reservoirs at Craighead overflow for a period of about twelve hours during the night. The present storage accommodation of the reservoirs is 230,000 gallons, and during the summer months a careful watch has to be kept on the supply as the yield from the springs is intermittent, and larger storage capacity is really necessary. The carrying mains from the reservoirs to the burgh are not sufficient to give the necessary supply during the hours of maximum demand, causing occasional complaints about want of pressure. In order to supplement the supply during the summer months, during the hours of maximum demand, an additional service reservoir of, say, 700,000 gallons, and a new trunk main to the town are required.

The distribution system within the burgh has been greatly improved during the past year, the old 2-inch cast-iron main in Gladstone Road, which was very much corroded, was lifted and renewed with a 4-inch bitumen-lined steel pipe. An additional 4-inch bitumen-lined steel pipe was also laid from Gordon Street

along Granary Street and Provost Street to Gladstone Road. A similar pipe was laid from Castle Street along East Park Street for a distance of 264 lineal yards. The dead-ends existing on Princes Street, Nelson Street, Bleachfield Street, Albert Terrace, and Queen Street have all been connected up, giving a complete circulation of water throughout the burgh. The result has been most satisfactory and a considerable improvement obtained in the pressure of water. The total new piping laid is as follows:—

4-inch bitumen-lined steel pipes . . .	1,079	lineal yards.
2-inch cast-iron do. . .	640	do.
<hr/>		
Total . . .	1,719	do.
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2. *Drainage*.—The main sewers continue to serve the needs of the burgh, and no extensions have been necessary during the year. Improvements and repairs were carried out at several manholes on the system. The sewer on Bleachfield Street was found to be in an unsatisfactory condition and was renewed for a distance of about 300 yards. (The old sewer was one of the first pipes laid in the burgh prior to the year 1884, and for nearly the whole length was open jointed.) The street surface water drainage has been greatly improved, and 240 new cesspools have been connected to the sewers throughout the burgh, properly trapped, and this will eliminate offensive smells.

Improvements of house drainage of old properties continues, and during the year improvements at eighteen different properties were carried out, the smoke test being applied in fifteen of these cases.

3. *Scavenging and Cleansing*.—The work of this department continues to give satisfaction, the clearing of household refuse being carried out every alternate day, as indicated in last year's report. The refuse is carted to the auction mart dump on the east side of the burgh.

Household refuse ought to consist of little more than ashes; vegetable and other refuse should, as far as possible, be burnt at home. It is encouraging to note that many householders realise that speedy removal and destruction of household wastes are important if offensive odours are to be kept down and risk of contamination and spread of disease avoided.

The dust bin, according to Section 107 of the Burgh Police (Scotland) Act, 1892, and the Cleansing Bye-laws in force in the burgh, must be a suitable receptacle meeting the requirements of the Inspector of Cleansing. Very many boxes used for this purpose do not do so, and it must be emphasised that any old box is not good enough for the purpose: many are too small, some are too large; the former are of insufficient capacity and the latter difficult to handle by the dustmen. Owing to the variety of bins and the predatory habits of dogs and cats, and the effects of wind on stormy days, the amount of refuse that reaches the streets and adjacent premises is considerable, and causes a great deal of extra sweeping, not to mention the deposit of dust on milk and other foodstuffs. The remedy for this state of affairs would be the general adoption of the sanitary dust bin.

Street cleaning is done daily, and the work has been considerably assisted by the improvement of street surfaces.

4. *Nuisances*.—It has only been necessary to serve a few intimations under Section 19 of the Public Health (Scotland) Act, 1897, during the year. The complaints made to the department were less numerous than in previous years, none of them being of a sufficiently outstanding nature to call for special reference.

Mention was made in last year's report regarding the position and condition of the public lavatory accommodation available in the burgh, which is still insufficient to meet the needs of the public. Additional sanitary conveniences in the vicinity of the Square are required.

5. *Matters Affecting Public Health (Housing).*

Report for year ended 31st December, 1930, on proceedings taken as regards the Inspection, Improvement, and Demolition and Closure of Dwelling-houses.

A.—HOUSING (INSPECTION OF DISTRICT) REGULATIONS (SCOTLAND), 1928.

(1) Number of dwelling-houses inspected	127
(2) Number of dwelling-houses which, on inspection, were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	43

HOUSING (SCOTLAND) ACT, 1925.

(3) Number of representations made to the Local Authority with a view to making of Closing Orders under Section 8	3
(4) Number of dwelling-houses in respect of which Closing Orders were made under Section 8	3
(5) Number of dwelling-houses the defects of which were remedied without either the making of Closing Orders or the service of Notices under Section 3	2

General information or observations as to the character of defects usually found to exist as to the extent to which overcrowding was found to prevail and the steps taken to remedy it, or as to the work of inspection generally.

The work of inspection has been confined mainly to houses where appearances indicated structural defects. These were principally damp and defective walls, leaking and sagging roofs, lack of and defective eaves, gutters, and conductors, earthen floors, irregular floor surfaces, sagging and low ceilings, insufficient light and ventilation, broken plaster, general disrepair and want of domestic and sanitary conveniences. Two cases of overcrowding were discovered, but owing to the scarcity of working-class houses no action was taken.

Considerable interest has been taken by the Town Council in the housing conditions existing in the burgh. A house-to-house inspection was carried out by the Public Health Committee of the worst properties in the town, with a view to forming a scheme under the Housing (Scotland) Act, 1930.

A three years' scheme has been drawn up and sent to the Department of Health, involving the demolition of forty-one houses and the erection of thirty-six houses to accommodate 182 persons who will be displaced, and it is hoped that good progress will be made in providing the necessary alternative accommodation meantime.

There are quite a number of other houses in the town which might be repaired and made fit for human habitation at reasonable expense, and it is hoped that progress will be made with this work.

Housing (Rural Workers) Act, 1926.—The number of applications for grant under the Housing (Rural Workers) Act, 1926, has been much more encouraging than in previous years. During the year seven applications were received for the repair and improvement of 16 houses, and 13 of these were completed at the end of the year, and grants amounting to £546 13s. 4d. have been paid during the year. The improvements carried out at these houses include—4 houses had the addition of scullery, inside water-closet, food store, and other repairs; 8 houses had water and sink introduced and additional water-closet accommodation provided, also other repairs; and 1 house had the addition of bathroom and bedroom accommodation. There are quite a number of houses in the town which could be reconstructed and repaired with aid of grant under above Act, and, no doubt, the Town Council will continue to consider sympathetically applications for the grant made under this Act.

5. *Sanitary Conveniences*.—There has been a progressive rise in what are considered the essential equipments of a house. If the provision of an internal water supply with waste water sink, separate convenience, scullery and food store, and facilities for washing clothes are essential equipments of a house, there are quite a number of working-class houses in the burgh not in this class. Water and sink inside each house are conducive to health, while their utility to the housewife is obvious. Water stored in open containers in a house very soon becomes stale and dust filmed. Another feature is that the disposal of slop-water from many of the houses presents a real difficulty to the occupiers, often necessitating the carrying of such a considerable distance, while in other cases the street water gullies are used for the disposal of slops, causing offensive smells, especially during summer weather. This is an objectionable practice, but until each house has the necessary water and sink accommodation this practice cannot be properly dealt with.

The statistics required by the Department of Health are:—

- (1) There are 247 common water-closets in the burgh—45 serving two tenants; 50 serving three tenants; 46 serving four tenants; and 106 serving five or more tenants.
- (2) The number of houses without water and sink inside the house has been reduced during the year from 293 to 253, being a reduction of 40 during the year, accounted for by water and sinks being introduced into 39 houses and the closing of one house.
- (3) There are 3 dry privies remaining at the end of the year—2 serving one tenant and 1 serving three tenants, being a reduction of one privy, which has been converted into the water carriage system.

(b) *An Account of General Inspections, and any Special Inspections or Enquiries, including the Supervision of Slaughter-houses, Offensive Trades, and Sanitary Condition of Factories and Workshops.*

1. *Slaughter-Houses*.—There are 3 private slaughter-houses and 1 hide and tallow store in the burgh. The general condition of cleanliness is satisfactory. Nine notices to limewash, in terms of the bye-laws in force in the burgh, were served. The number of visits of inspection made was 850.

2. *Factories and Workshops*.—78 visits of inspection were made, and the general condition of these premises was found to be satisfactory. One nuisance was found, but on verbal warning being given the nuisance was abated. At one workshop the sanitary accommodation was defective, but on representation being made to the owner the defect was remedied.

(c) *An Account of the Condition of the Common Lodging-Houses.*

There are no common lodging-houses within the burgh.

(d) *An Account of the Condition of the Burial Grounds.*

There are no burial grounds within the burgh.

(e) *An Account of the Proceedings under the Burgh Police Acts.*

Three notices were served on owners of property under Section 146 of the Burgh Police (Scotland) Act, 1892, to repair rhones and rain-water conductors for conveying water from roofs. The repairs have been carried out.

Notices were served on 11 owners under Section 246 of the Burgh Police (Scotland) Act, 1892, calling for the introduction of inside water supply and sinks into 42 houses, and I am pleased to report these have been introduced into 39 houses during the year.

T. HUTSON, *Sanitary Inspector.*

BURGH OF INVERURIE.

Water Supply.—The water supply to the burgh is obtained from three different sources, viz. :—Mill of Easterton, Keith-hall, and Port-Elphinstone.

The water is of a very good quality, clear and transparent, and very suitable for all domestic and trade purposes.

The supply from each of the sources varies during the several seasons of the year, but, by taking an average of the readings which are obtained at intervals, we have the following rates of supply :—

Mill of Easterton	.	.	.	383	gallons per minute.
Keith-hall	.	.	.	80	„ „
Port-Elphinstone	.	.	.	16	„ „
				<hr/>	
Total	.	.	.	479	„ „
				<hr/>	

Taking the foregoing rate of supply at the average of 479 gallons per minute, we have a total of 28,740 gallons per hour, or an average of 689,760 gallons per day of twenty-four hours. By dividing this total supply with the average population of 4,450, we have a daily supply at the rate of 155 gallons per head per day.

The above figures show a considerable increase in the average rate of water supply to the burgh when compared with the supply during the year 1929. For the year 1929 the average supply was only at the rate of 90 gallons per head per day; this was caused, however, by the excessive drought during the summer months of that year.

During the year all filter beds, settling tanks, and reservoirs were cleaned out and lime-washed.

The water mains throughout the burgh are provided with a considerable number of scour valves, which are opened practically every month and sometimes oftener for the purpose of scouring out the water mains, in order that the public may have as pure a water supply as is possible to obtain.

Several extensions were made to the water mains at North Street and Harlaw Road to meet with the demands of the new housing schemes. This work entailed an expenditure of about £100.

During the year it was found necessary on several occasions to renew stop cocks on private water supplies and also to repair one or two of the larger stop valves on the water mains.

Drainage.—The main sewers and house drains throughout the burgh are all kept in a very satisfactory condition.

The overflow from Brandsbutt reservoir connects with the main sewer at the top of North Street, and the water therefrom tends to keep the sewer at this point of the town in a very clean condition.

During the year new drains were laid in connection with 24 houses erected by the Town Council, viz. :—8 houses at Harlaw Road, 8 houses at North Street, and 8 houses at Allan Place. New drains were also laid in connection with one new house at Cunninghill Road and one at Upperboat Road.

Several other house drains throughout the burgh were renewed for the purpose of installing water-closet and sink accommodation. All the above works were carefully inspected and smoke tested.

Scavenging.—The scavenging arrangements throughout the burgh are carried out in a very satisfactory manner. To ensure that every street receives the attention of the scavenger, the burgh is divided into three sections, viz. :—

No. 1 Section.—Victoria Street, North Street, Constitution Street, Harlaw Road, and all side streets leading off.

No. 2 Section.—West High Street, Market Place (east and west side), High Street, St. James' Place, and all side streets leading off.

No. 3 Section.—Port-Elphinstone.

Each of these sections is swept daily, with the exception of Port-Elphinstone, which is cleaned every Tuesday and Friday forenoon.

With reference to the removal of household refuse, which is carried out by contract, it might be mentioned that, owing to (1) the increasing number of new houses being erected within the burgh every year and (2) an application made by the contractor for extra remuneration for the extra work entailed, the Council, after careful consideration, thought it advisable, rather than increase the burden on the ratepayers, to alter the system of removal from the daily cleansing system to the alternate system as follows :—

Monday, Wednesday, and Friday Forenoons.—Keith-hall Road, High Street, Market Place (east and west), Souterford Road, West High Street, Westfield Gardens, Middlemuir Road, Blackhall Road, and Victoria Street, with all lanes and courts included.

Monday, Wednesday, and Friday Afternoons.—St. James' Place, Upperboat Road, Manse Road, and Port-Elphinstone.

Tuesday, Thursday, and Saturday Forenoon.—North Street, Saphock Place, Watt Crescent, Mortimer's Lane, Pirie's Lane, Gallowfold Lane, Harlaw Road, Garioch Road, Constitution Street, with all other lanes and courts included.

Handbills were printed and distributed throughout the burgh notifying the foregoing alterations on and after the 19th May, 1930.

So far, the public are very satisfied and the system is working exceedingly well.

As mentioned in previous reports, the collection of household refuse could be helpfully assisted if householders would exercise a little care and burn all waste papers, potato skins, and other like materials instead of placing them in their ash bins.

It is only by attending to these small details that the scavenging arrangements of a burgh become more economical and to the interest of the ratepayer.

There are still a few dust bins in use throughout the burgh, but these are principally in connection with the schools and houses in the outlying district, together with those used by the scavengers. All the others have been removed, with the exception of one, which is at present under consideration for removal.

Sanitary Arrangements throughout the Burgh.—List of houses having the use of and without water supply, sinks, and water-closets inside :—

Distribution of tenants, and the number of blocks.		Use of water-closet inside.	Use of water supply.	Use of wash- houses.	Use of bath- room.	Houses without sink or water in house.	Dry earth closets.
Block One House, .	526	526	526	262	233	11	1
„ Two „ .	85	85	55	—	—	29	—
„ Three „ .	50	54	50	33	—	50	—
„ Four „ .	58	56	58	54	—	108	2
„ Five „ .	11	11	11	11	—	28	—
„ Six „ .	14	16	14	14	—	83	—
and over							
•Total. .	744	748	714	374	233	299	3

In several instances, where it is shown that sufficient water-closet accommodation or water supply is not provided inside the houses, the proprietors are being notified to instal these fittings.

During the year 28 new water-closets were fitted up, together with 27 baths, 27 sets of sink and tubs, 8 sinks, and 3 wash-hand basins.

There are still 3 dry earth closets within the burgh, but 2 of these are at present under consideration for removal, and it is probable that these will be removed within the next few weeks.

Housing.—The housing conditions within the burgh are becoming more satisfactory. With the additional houses which are being erected year after year by the Town Council and by private enterprise there is the desire for better housing accommodation for all classes.

During the year 24 houses of the three-apartment type were erected by the Town Council on a feu between Harlaw Road and North Street. There were also 2 houses erected under the Housing Acts and several improvements carried out to older houses in order to provide more accommodation.

At present, the Town Council are having erected other 20 houses, which will be completed before the end of the year 1931.

Infectious Diseases.—During the year the number of cases of infectious disease notified to me were as follows:—Scarlet fever, 12; diphtheria, 14; other sickness, 3.

Visits of inspection were made in every case and the bedding and apartments were disinfected.

Nuisances.—During the year systematic inspections were made throughout the burgh in order to ascertain what nuisances existed and calling for attention, when, altogether, 404 inspections were made.

Twenty-six complaints were received as to the existence of nuisances and 68 nuisances were dealt with and remedied.

The principal nuisances consisted of choked drains, defective water pipes, water-closets, rhones, and rain-water conductors.

Slaughter-House.—The public slaughter-house, which is owned by the Town Council, is situated off North Street, and consists of 6 cattle booths, pig booth, and 2 byres. The booths are let to local cattle dealers and butchers yearly, who are responsible for keeping the same in a clean condition. The walls and floors of the booths are washed down daily after slaughtering is over.

The number of animals killed at the slaughter-house for the year ending 31st December was as follows:—

Oxen.	Bulls.	Heifers.	Cows.	Sheep.	Calves.	Pigs.	Total.
5,738	146	7,840	545	13,742	20	87	28,118

Unsound Food.—Beef and mutton seized at the slaughter-house during the year as being unfit for human consumption was as follows:—

Carcases Wholly Seized.

	Oxen. lbs.	Heifers. lbs.	Bulls. lbs.	Cows. lbs.	Sheep. lbs.	Calves. lbs.	Pigs. lbs.	Total. lbs.
Tuberculosis, .	9,288	14,752	602	6,573	—	—	448	31,663
Other Diseases,	1,065	336	800	5,966	761	—	240	9,168
	10,353	15,088	1,402	12,539	761	—	688	40,831

Portions of Carcases Seized.

	Oxen. lbs.	Heifers. lbs.	Bulls. lbs.	Cows. lbs.	Sheep. lbs.	Calves. lbs.	Pigs. lbs.	Total. lbs.
Tuberculosis, .	11,813	16,601	446	857	—	—	44	29,761
Other Diseases,	340	350	—	—	12	—	—	702
	12,153	16,951	446	857	12	—	44	30,463

Total Seized.

	Oxen.	Heifers.	Bulls.	Cows.	Sheep.	Calves.	Pigs.	Total.
Tuberculosis, .	21,101	31,353	1,048	7,430	—	—	492	61,424
Other Diseases,	1,405	686	800	5,966	773	—	240	9,870
	22,506	32,039	1,848	13,396	773	—	732	71,294

The partial seizures consisted of tissues or organs from thoracic cavity, such as lungs, hearts, chest walls, right and left, and from abdominal cavity, such as abdominal walls, right and left, liver, kidneys, tripe: and heads, tongues, hind-quarters, &c.

Other Diseases.—Dropsy, pneumonia, inflammation, emaciation, pleurisy, septic poisoning, and the bruising of parts.

Offensive Trades.—There are four offensive trades carried on within the burgh, viz.:—Two hide and tallow companies and two gut and pudding manufacturers. The hide and tallow companies' works are visited by me practically every day, while the gut premises are visited monthly.

All these premises are kept in a very clean condition, being washed down daily and all the rubbish removed.

Schools.—There are four schools within the burgh, and these are all kept in a very good state of repair. The schools are kept very clean, and disinfection is carried out whenever there is an opportunity, such as week-ends and holidays.

Factories and Workshops.—There are 25 factories on the register, including laundries, and 40 workshops. Inspections were made of all the premises during the year. On several occasions owners were called upon to have their premises cleaned: all the others are kept in a very good condition.

Common Lodging-Houses.—There are no houses in the burgh coming under the definition of common lodging-houses.

Dairies, Cowsheds, and Milkshops.—The following were on the register for the year ending the 31st December, 1930:—

Cow-keepers.—There are six persons who keep one or two cows, principally for their own use, and any milk over is generally sold to their friends or neighbours.

Retail Purveyors of Milk.—There are six persons who retail milk to customers throughout the burgh.

Wholesale and Retail Purveyors of Milk.—There are three persons on the register, mostly farmers, who sell their milk wholesale to dairies in Aberdeen and retail the balance to customers within the burgh.

During the year the Northern Co-operative Society was granted permission to retail milk to their customers. The milk is pasteurised and sold in sealed bottles.

Two of the principal dairy farmers within the burgh, namely, Mr. John Shand, Uryside, Inverurie, and Mr. Frank Kindness, Port-Elphinstone, have given up keeping cows on a large scale and now only retain one or two cows for their own use.

Inspections are made during the year of all the premises and vehicles, and these are generally kept in a very clean condition.

WILLIAM D. CONNER, *Sanitary Inspector.*

BURGH OF TURRIFF.

General Sanitary Condition.—The burgh of Turriff, with all sewers, drains, and water-closets is in good working order, well ventilated and sufficiently trapped, and with the streets and gullies cleaned daily, it may be considered to be in a good condition, which is further maintained by the collection of all ashes and household refuse and by a modern system of water-closets which have entirely replaced the old dry ones.

Infectious Diseases.—During the year 19 cases have been notified, viz.:—Scarlet fever, 12; diphtheria, 5; erysipelas, 2. All the cases were removed to the fever hospital. The five diphtheria cases were confined to one family.

Water Supply.—The principal water supply has its source about three miles distant on the Town Council's own estate. This supply is collected from springs on high ground cut at a depth of from 12 to 16 feet. The sub-soil being originally of gravel, the purest of water is filtered and produced. An additional supply was secured three years ago to augment the principal supply. Owing to about 100 additional houses being erected with bathrooms, &c., extra water is required for a short period during the dry summer months. A distributing main 3 inch in centre of town has been renewed with a 6-inch pipe, and several 1½-inch pipes have been replaced with 3-inch pipes.

Sewers.—The sewers throughout the burgh are in good condition and rather extensive on account of the largeness of feus and the consequent width of houses. I may further report that the sewage at present flows into what is known as the Back Burn, then into Turriff burn, and then into the River Deveron. I may also add that the sewage purification scheme is near completion.

Common Lodging-House.—During the year 1,020 beds were supplied in this house, which has accommodation to hold 13 lodgers. The premises are inspected weekly, and the lodgers' compartments have always been found to be well kept and the sanitary arrangements satisfactory.

Schools.—The schools are modern, with ample accommodation and well ventilated. The principal school is centrally heated. There is a range of modern w.c.'s with three automatic flushing tanks—two holding 80 gallons and one 40 gallons. All the sanitary arrangements are well kept.

Slaughter-Houses.—These are the property of the Town Council, and consist of five compartments. Four are let and one is kept for general use. The houses were erected more than fifty years ago. The booths are divided by plain, rough boarding, and the internal walls are built with stone and lime. Neither are tiled nor plastered, and, therefore, it is quite impossible to keep them in a proper sanitary condition. The number of animals killed during the past year is as follows:—Cattle, 1,454; sheep, 1,338; pigs, 103. Twenty-one carcasses were submitted and detained for examination, resulting in the seizure, with owner's consent, of 4,424 lbs. of beef, 380 lbs. of mutton, and 70 lbs. of pork, and also 40 lbs. of preserved meat, such as corned beef, rolled ham, and spiced tongue. The animals were as follows, viz.:—Bullocks, 2; heifers, 4; cows, 2; sheep, 12; pigs, 1; and 7 suffered from tuberculosis, 13 from inflammation, and 1 from anthrax.

Workshops.—There are, in all, 35 workshops and 15 factories falling under the regulations of the Factory and Workshops Act. All are sufficiently lighted and well ventilated and kept in a satisfactory condition. There are no workshops or bakehouses underground and no home workers come under the regulations of the Home Work Order.

Dairies.—Falling under the regulations of the Dairy Order, there are within the burgh five dairies, embracing 22 cows, and, in addition, one person keeps one cow. The principal supply is brought in from large dairies outside the burgh. Mr. Howie, Veterinary Inspector, was appointed inspector to carry out the whole of the regulations under the Dairy Order in the burgh of Turriff.

Housing.—The population of 2,153 live in 711 houses, 239 of which have a rental of £16 or over. During the year 11 houses have been built and completed by the Council. The position with regard to conveniences such as w.c.'s, &c., is as follows:—288 tenants have 1 w.c. each; 109 w.c.'s serve two tenants each; 63 w.c.'s serve three tenants each; and 4 w.c.'s serve 4 tenants each. 471 houses are fitted with water and sinks inside the house, and the remaining 240 houses get the water supply from taps attached at back of house.

Burial Grounds.—Two burial grounds lie within the burgh. One is the old churchyard, which is now practically closed, and the other is in connection with the Episcopal Church, where there are only one or two burials annually. The principal cemetery lies outside the burgh. They are all kept in a satisfactory condition.

No proceedings have been taken under the Burgh Police Act during the year.

WILLIAM JOHNSTON.

BURGH OF PETERHEAD.

Water Supply.—The water supply to the burgh during the year was sufficient for all purposes. The reservoirs at Forehill, containing a total of 16,000,000 gallons, were overflowing the greater part of the year. The lowest point was reached in August when there would have been approximately 10,000,000 gallons in reserve. There were, as usual, complaints from certain householders situated in the higher parts of the burgh regarding a rather intermittent supply, but, as already explained, the only remedy for this is the provision of storage cisterns inside the houses.

Two filter beds have been in operation the whole year without cleaning or replenishing.

The water from the Wellington source only supplies four houses within the burgh.

The quality of the water was up to the usual high standard of purity, and has always been favourably reported upon by the Analyst.

Rainfall.—The following is a record of the rainfall for the past five years, from which it will be observed that the 1930 fall is considerably above the average :—

MONTHLY RAINFALL.				
	Rainfall. Inches.	Greatest fall in 24 hours. Inches.	Date.	No. of days with ·01 or more.
January, . . .	1·87	·48	1st	15
February, . . .	1·11	·20	3rd	12
March, . . .	1·13	·23	16th	16
April, . . .	3·35	·60	2nd	20
May, . . .	1·58	·27	8th	15
June, . . .	1·95	·36	28th	13
July, . . .	1·48	·48	21st	12
August, . . .	8·21	2·04	19th	24
September, . .	4·97	1·20	10th	19
October, . . .	4·64	1·18	8th	22
November, . . .	4·75	·66	22nd	24
December, . . .	3·35	·69	11th	19
Total—1930, .	38·39	2·04	19th Aug.	211
1929, .	31·39	1·34	21st Dec.	210
1928, .	29·90	·97	23rd Nov.	221
1927, .	35·65	1·88	22nd Sept.	233
1926, .	34·49	1·52	20th Sept.	225

Drainage.—The main drainage of the burgh is in quite a satisfactory condition. Apart from one or two very flat gradients and insufficient flushing, the system is in all respects quite good. The sewers in Seagate, Shiprow, Pleasure Walk, Windmill Street, Victoria Road, and Ugie Street were thoroughly cleaned during the year.

There has again been flooding at the watercourse from the Kinmundy Road to the West Turnpike along the west boundary of the housing feu. It is intended to prepare a scheme to cover in the watercourse so as to prevent the overflow of the burn on to the housing feus.

Sewage Disposal.—All the sewage of the burgh in its crude state is discharged from ten separate outfalls into the sea, with the exception of the outlet for the few houses situated in the South Road, which discharge above high water level. I have never received a complaint regarding any of these outfalls.

The main outfall sewer serving part of Keith Inch and discharging into the sea at Greenhill is being extended nearer low-water mark, as the excavations from the harbour improvements are being deposited on this part of the fore-shore.

Scavenging.—There is nothing new to report in connection with the Cleansing Department, and practically the same conditions obtain as stated in my last year's report.

There are still 35 dry closets and one ashpit within the burgh. These are, with one or two exceptions, either connected with fish-curing yards or so situated that difficulties might arise with regard to drainage if the water carriage system were to be enforced. None of these are situated in populous or closely-built centres, and there have been no conversions to the water carriage system during the year.

I would again refer to the practice of placing the ashbins on to the public street in the evening prior to the morning of collection. The greater number of these receptacles have no proper lid, and are kicked about, and the contents scattered in the streets long before morning. The practice is not confined to any particular district, but is prevalent throughout the town. In the principal streets it ought to be strictly prohibited.

I have also to refer again to the waste paper nuisance, which is as prevalent as ever. Loose paper is placed in uncovered ashbins and boxes and put on to the street for collection, with the result that within a few minutes the streets are strewn with papers.

Nuisances.—77 intimations of nuisances were served under Section 19 of the Public Health (Scotland) Act, 1897, and a large number were dealt with verbally.

There has been little or no improvement in the provision of water-closet accommodation in the oldest part of the Ronheads and Buchanhaven. These properties are owned by the poorer class of fishermen whose calling has been very unremunerative during the past few years, so that it is almost impossible to enforce any improvements at the present time.

General Inspections.—The general inspections made during the year were in connection with nuisances, infectious disease, milkshops, factories and workshops, housing, &c. The special inspections made during the year were in connection with the Housing (Scotland) Act, 1930, and a special report on the housing conditions has been prepared and submitted to the Department of Health and Town Council.

Slaughter-House.—The only slaughter-house within the burgh belongs to the Local Authority, and has always been kept in a very satisfactory manner.

The following are the details of the slaughtering done for the past year:—

Cattle.		Sheep.		Pigs.		Revenue.
1,743	...	908	...	170	...	£297 8s.

There is an increase in revenue of £21 0s. 10d. over the year 1929.

During the year 68 carcasses were affected with tuberculosis, viz.:—34 whole and 34 part, weighing 7 tons 2 cwts. 3 lbs., all of which was condemned and sent to Charles Napier & Co. and W. Sim & Co., Manure Manufacturers, Aberdeen.

Offensive Trades.—There are three offensive trades within the burgh, viz., Fish meal, tripe and gut cleaning, manure and fish meal factory. There have been no complaints regarding any of these works during the year.

Schools.—The burgh is well provided with 6 large public schools, all of which are in a satisfactory condition.

Factories and Workshops.—There are 113 workshops on the register, made up as follows :—

Tailoring	12
Baking	15
Dressmaking and Millinery	6
Fish-curing	41
Others	39

The lavatory accommodation in several fish-curing yards is not satisfactory. A number have insufficient accommodation and others lack separate and suitable conveniences for both sexes.

Common Lodging-Houses.— There are no common lodging-houses within the burgh.

Burial Grounds.—There are two burial grounds within the burgh, both of which are satisfactory in every respect.

Burgh Police Act.—The following notices were served under the Burgh Police Act :—

Cleansing and washing common stairs and passages	7
Whitewashing common stairs and passages	62
Repair rhones and spouts	12
Cleaning water-closets	7

Food Inspection.—The system of food inspection within the burgh appears to be quite adequate. All butcher meat sold passes through either the public slaughter-house or the Aberdeen dead meat market.

The only observation I would make with regard to food is about the questionable conditions under which ice cream is prepared, manufactured, stored, and exposed for sale. There appears to be an increasing demand for this commodity judging by the greater number of street vendors, and it is essential that it should be produced under the most hygienic conditions. It is quite a simple matter to conform to Section 54 of the Burgh Police (Scotland) Act, 1903, but, in my opinion, that is no guarantee that the premises in which the ice cream is manufactured and stored are suitable for the purpose. The inspection of these premises is also a difficult matter. No registration is required, and vendors of ice cream can manufacture it under conditions quite unknown to the authorities.

Messrs. Crosse & Blackwell are manufacturers of tinned foods, such as herring and tomatoes, kippers, &c. Their premises, which are regularly inspected, are always kept in a most cleanly condition and there has never been the slightest cause for complaint.

Apart from bakehouses, milkshops, and ice cream shops, there are no other premises where food is manufactured to any extent. The occupiers of milkshops as a rule make oatcakes, scones, potted meats &c., but, on the whole, these are produced under most cleanly conditions.

Food and Drugs.—The County Council is now responsible for the administration of the Food and Drugs Act within the burgh.

Housing.—A scheme of assistance under the Housing (Rural Workers) Act, 1926, in aid of the reconstruction and improvement of houses for the occupation of agricultural workers, or for persons whose economic conditions are substantially the same as that of such workers, was adopted by the Town Council during the year. No application for assistance was received.

One application was received for a grant under the Housing (Scotland) Act, 1923, in respect of dwelling-houses to be erected within the burgh.

During the year 16 houses were erected under the Housing (Scotland) Act, 1924, viz., 8 of three apartment and 8 two apartment, and an additional 16 houses are at present in course of erection—12 of three apartment and 4 of two apartment.

Housing (Scotland) Act, 1930.—The Town Council had under consideration during the year the Housing (Scotland) Act, 1930, and a Sub-Committee was appointed to report on (1) the measures to be taken during the next three years for dealing with the housing conditions of the burgh and the provision of further housing accommodation; (2) the acquisition and lay-out of a suitable site for the erection of houses for tenants who will be displaced under the Act; and (3) the type of houses to be erected.

I was instructed to make a survey of the housing conditions in the burgh and to submit a report to the Town Council.

The Sub-Committee has given careful consideration to the report of the Sanitary Inspector on properties within the burgh which are injurious or dangerous to the health of the inhabitants by reason of their disrepair, sanitary defects, overcrowding, the bad arrangement of the houses or the narrowness or the bad arrangement of the streets. This report embraces 88 houses with 353 occupants. The Sub-Committee is satisfied that it is essential, in the interests of Public Health, that these houses should be demolished, and they recommend that the Local Authority should adopt this as a programme for the next three years. As these houses are scattered over a wide area, it is considered inadvisable to proceed either by way of a clearance area or improvement area, but to deal with each property separately, in terms of Part II. of the Act.

It is the intention of the Act that re-housing should proceed in advance of the displacement of persons who will be affected under the powers of the Act, and that new accommodation should be available when the actual displacements take place. The Sub-Committee has given careful consideration to the proposals of the Sanitary Inspector regarding the provision of new houses as set out in the summary to his report. They do not consider it desirable that two-apartment houses should be erected in connection with this scheme, but recommend that, for the next three years, the following programme of new houses should be adopted:—

36 three-apartment houses	.	180	units of accommodation.
20 four-apartment houses	.	140	„ „
4 five-apartment houses	.	36	„ „
—		—	
60		356	
—		—	

It is recommended that these houses should be erected at the rate of 20 per annum, and that Demolition Orders should be served in the case of a corresponding number of insanitary dwellings, to take effect at the date when the new houses will be ready for occupation.

The Sub-Committee suggests that the three and four-apartment houses should be of the flatted type, built in blocks of four dwellings, and that the five-apartment houses should be of the cottage type.

The Sub-Committee recommends that, as soon as the terms of feuing can be arranged, the scheme should be submitted to the Department of Health for approval and that, on such approval being obtained, the work of constructing the streets and providing water, gas, and sewerage services should proceed without delay."

The Sub-Committee, after due consideration, came to the conclusion that the most suitable site for the erection of houses under the 1930 Act was the field in Ugie Street, bounded by Ugie Street, Ware Road, Geddle Braes, and Old Hospital Road, and negotiations are taking place with the view of ascertaining the terms on which this ground can be feued.

A full report on the conditions of the houses proposed to be closed when alternative accommodation is provided has been prepared and copies sent to the Department of Health and Town Council. In all probability, it will be Whitsunday, 1932, before the first instalment will be ready for occupation.

Rag and Flock Act, 1911.—No proceedings were taken under the above Act during the year.

JAMES DICKIE, *Sanitary Inspector.*

HOUSING (INSPECTION OF DISTRICT) REGULATIONS (SCOTLAND). 1928.

1. Number of dwelling-houses inspected,	104
2. Number of dwelling-houses which, on inspection, were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation,	83

HOUSING (SCOTLAND) ACT, 1925.

Number of cases where intimations were given under Section 20 (1) as to insufficient water-closet accommodation,	19
(a) Cases where requirements complied with by owners,	19
(b) Cases where works carried out by Local Authority after failure of owners to do so,	—
(c) Cases still pending,	—

UNSOOUND FOOD.

1. *Meat.*

Number of seizures, weights of meat seized, and reasons for seizure.

	Number.	Beef.	Weight.
Tuberculosis,	64	7 tons 2 qrs.	3 lbs.
Unsound condition,	11		56 lbs.
	75	7 tons 2 qrs.	59 lbs.

2. *Other Articles of Food.*

Articles.	Where seized.	Quantities or weights.	Reasons for seizure.
Tinned fruit.	Various shops.	20 tins.	Decomposed.

